



IES INDOOR REPORT
PHOTOMETRIC FILENAME : HBRMSR-LED135DHV50.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]
 [TESTLAB] Dongguan New Testing Centre Co., Ltd
 [TESTDATE] 20 May 2019
 [ISSUEDATE] 2019-05-20 09:10:44
 [NEARFIELD]
 [LAMPPOSITION] 0,0
 [OTHER] EVERFINE GO-R5000_V2 SYSTEM
 [MANUFAC] Mobern Lighting Co.
 [LUMCAT] HBRMSR-LED135DHV50
 [MORE] MHB04
 [LUMINAIRE] LED
 [BALLAST] 347-480Vac,50/60Hz
 [OTHER]

[OTHER]	Gamma(deg)	Fz(lm)	Ft(lm)	%Lum	%Lamp
[OTHER]	0- 10	800.23	800.23	4.09	4.09
[OTHER]	10- 20	2394.45	3194.69	16.34	16.34
[OTHER]	20- 30	3937.77	7132.46	36.48	36.48
[OTHER]	30- 40	5143.67	12276.13	62.80	62.80
[OTHER]	40- 50	4794.29	17070.42	87.32	87.32
[OTHER]	50- 60	1992.11	19062.53	97.51	97.51
[OTHER]	60- 70	291.20	19353.73	99.00	99.00
[OTHER]	70- 80	141.49	19495.21	99.72	99.72
[OTHER]	80- 90	39.35	19534.56	99.93	99.93
[OTHER]	90-100	0.15	19534.71	99.93	99.93
[OTHER]	100-110	0.52	19535.23	99.93	99.93
[OTHER]	110-120	1.12	19536.35	99.93	99.93
[OTHER]	120-130	1.92	19538.26	99.94	99.94
[OTHER]	130-140	2.66	19540.92	99.96	99.96
[OTHER]	140-150	2.98	19543.91	99.97	99.97
[OTHER]	150-160	2.74	19546.65	99.99	99.99
[OTHER]	160-170	1.87	19548.52	100.00	100.00
[OTHER]	170-180	0.66	19549.18	100.00	100.00
[OTHER]					

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CHARACTERISTICS

Lumens Per Lamp	19549 (1 lamp)
Total Lamp Lumens	19549
Luminaire Lumens	19549
Total Luminaire Efficiency	100 %
Luminaire Efficacy Rating (LER)	145
Total Luminaire Watts	135.026
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.50
Spacing Criterion (90-270)	1.50
Spacing Criterion (Diagonal)	1.46
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.35 m (Diameter)
Luminous Width (90-270)	0.35 m (Diameter)
Luminous Height	0.00 m

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	94695	94499	93943
55	38339	38845	39039
65	5955	5824	5929
75	5271	5135	5255
85	2634	3886	4320

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CANDELA TABULATION

	0	15	30	45	60	75	90	105	120	135
0	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26
1	8353.45	8353.11	8351.14	8354.81	8355.64	8360.45	8360.55	8363.31	8369.80	8374.47
2	8344.99	8344.64	8341.10	8349.19	8349.40	8354.69	8361.57	8366.32	8375.90	8382.78
3	8335.20	8337.03	8336.51	8339.60	8346.28	8354.68	8362.93	8370.47	8379.75	8392.45
4	8328.10	8328.00	8330.94	8338.80	8341.53	8354.00	8363.31	8374.96	8388.59	8399.27
5	8319.65	8323.39	8325.11	8332.31	8338.39	8355.04	8365.13	8382.64	8396.95	8410.43
6	8319.04	8317.26	8318.56	8331.56	8337.95	8355.45	8370.17	8385.92	8404.98	8421.39
7	8312.54	8312.16	8313.37	8327.80	8340.34	8358.58	8374.99	8390.63	8415.89	8431.97
8	8310.12	8306.95	8311.87	8324.38	8336.92	8363.39	8377.43	8399.20	8423.53	8443.82
9	8306.32	8304.48	8307.47	8326.04	8336.56	8365.09	8383.16	8407.66	8433.70	8456.01
10	8303.18	8300.40	8307.00	8322.28	8339.95	8365.18	8387.35	8415.32	8441.91	8467.20
11	8300.11	8298.70	8305.65	8320.94	8338.31	8370.02	8393.56	8424.66	8454.25	8480.27
12	8301.08	8297.66	8306.64	8323.04	8342.67	8374.17	8400.44	8432.41	8467.41	8493.31
13	8299.73	8297.33	8305.29	8325.76	8343.80	8380.49	8406.43	8441.08	8475.46	8506.42
14	8302.77	8298.36	8305.27	8327.63	8350.23	8386.06	8414.52	8451.17	8489.02	8518.53
15	8304.18	8299.09	8306.96	8332.40	8354.87	8392.25	8423.00	8458.87	8502.35	8531.39
16	8302.12	8301.85	8311.39	8335.49	8360.38	8399.57	8432.06	8469.97	8513.69	8544.03
17	8307.88	8304.27	8315.97	8339.64	8366.53	8410.68	8441.11	8483.06	8522.87	8557.38
18	8310.67	8306.76	8320.81	8344.54	8375.18	8417.53	8448.14	8490.84	8534.55	8572.40
19	8318.57	8312.01	8325.20	8350.07	8378.75	8424.92	8458.46	8500.97	8545.81	8583.03
20	8321.03	8318.53	8332.19	8356.01	8387.98	8431.36	8469.13	8509.99	8554.59	8591.91
21	8327.52	8324.84	8335.59	8360.98	8394.65	8439.37	8478.47	8519.72	8566.42	8603.39
22	8335.11	8335.02	8342.59	8372.57	8401.87	8450.93	8487.06	8526.80	8572.83	8610.90
23	8342.81	8340.95	8350.42	8378.77	8410.60	8457.19	8492.22	8533.07	8582.15	8617.93
24	8348.97	8347.15	8359.31	8385.38	8416.10	8464.44	8500.67	8540.79	8589.99	8621.66
25	8357.83	8352.02	8362.57	8390.19	8423.68	8471.92	8503.71	8541.67	8591.33	8626.53
26	8363.84	8357.90	8369.04	8392.61	8426.54	8473.58	8507.03	8543.35	8590.62	8623.22
27	8366.66	8362.32	8373.71	8394.62	8424.87	8472.51	8502.65	8535.99	8587.39	8618.39
28	8367.37	8364.98	8372.70	8393.16	8422.46	8467.90	8496.68	8530.87	8575.73	8604.65
29	8365.36	8359.51	8369.60	8387.97	8416.01	8458.23	8486.91	8519.89	8560.60	8585.12
30	8355.04	8353.83	8359.83	8377.30	8402.57	8447.15	8471.69	8497.45	8539.91	8564.25
31	8343.03	8340.98	8347.81	8365.18	8384.69	8426.08	8445.42	8470.72	8509.94	8530.95
32	8323.67	8319.50	8325.05	8340.14	8363.35	8397.73	8417.73	8432.07	8472.13	8487.38
33	8296.02	8292.59	8296.15	8309.11	8329.13	8360.62	8375.68	8388.16	8421.02	8430.20
34	8256.17	8258.21	8259.16	8271.26	8285.79	8312.31	8325.70	8333.44	8364.04	8370.27
35	8209.06	8211.76	8209.66	8220.00	8231.88	8251.80	8258.92	8262.53	8288.10	8288.33
36	8145.18	8146.31	8145.00	8157.93	8160.13	8178.94	8184.05	8174.98	8199.77	8192.99
37	8065.41	8071.62	8068.02	8077.47	8073.59	8086.30	8089.50	8072.38	8090.39	8082.82
38	7969.42	7973.33	7972.38	7977.72	7967.94	7977.97	7972.29	7948.79	7963.46	7950.02
39	7847.97	7854.71	7854.20	7853.68	7840.62	7845.30	7835.82	7804.66	7814.58	7796.17
40	7700.07	7708.49	7705.93	7705.14	7682.58	7680.23	7669.23	7631.82	7636.63	7618.35
41	7521.67	7535.63	7529.38	7525.83	7494.88	7492.81	7481.77	7433.07	7438.20	7414.25
42	7308.43	7329.41	7317.88	7310.22	7277.52	7269.60	7263.18	7204.40	7213.46	7182.23
43	7062.70	7080.95	7070.27	7060.33	7021.47	7019.59	7008.43	6945.31	6948.01	6922.13
44	6771.87	6790.17	6774.62	6764.45	6724.17	6727.34	6717.91	6650.88	6657.09	6624.28
45	6445.00	6464.01	6447.61	6431.67	6394.07	6396.90	6393.83	6323.64	6326.69	6299.27
46	6066.32	6086.65	6067.00	6054.98	6014.30	6027.38	6032.21	5957.34	5971.25	5939.97
47	5646.51	5670.71	5649.56	5636.67	5602.44	5619.19	5635.24	5558.81	5568.32	5548.52
48	5204.39	5224.20	5211.22	5195.74	5157.18	5182.81	5202.53	5130.43	5153.95	5130.04
49	4734.28	4756.08	4741.09	4728.42	4698.11	4719.49	4745.72	4679.83	4711.40	4691.77
50	4255.99	4284.96	4267.41	4259.12	4229.64	4261.30	4284.54	4232.98	4259.72	4247.18
51	3790.21	3817.83	3800.95	3795.76	3775.48	3803.23	3837.01	3778.39	3809.53	3788.24
52	3346.03	3373.80	3348.23	3354.71	3333.80	3353.51	3389.55	3341.51	3363.61	3341.51
53	2918.90	2942.41	2918.59	2926.66	2906.26	2918.78	2949.38	2910.74	2934.92	2909.48

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54	2502.21	2533.31	2501.74	2515.66	2483.57	2496.74	2529.36	2485.19	2511.53	2484.05
55	2116.61	2163.05	2109.49	2144.54	2084.36	2127.58	2155.25	2082.78	2134.01	2077.69
56	1745.32	1792.80	1733.41	1773.41	1709.60	1758.42	1781.14	1701.82	1756.49	1701.52
57	1408.38	1423.77	1386.52	1403.12	1362.70	1390.54	1408.24	1345.86	1379.75	1346.49
58	1104.09	1109.04	1073.28	1092.62	1056.75	1079.89	1088.92	1042.81	1072.87	1040.77
59	891.16	842.56	859.92	819.70	844.07	804.49	815.86	835.33	814.35	837.59
60	679.72	627.30	649.02	600.61	632.90	584.77	597.14	628.07	603.03	636.67
61	468.27	464.73	438.12	438.48	421.73	427.95	437.69	420.80	448.36	435.75
62	362.50	356.64	341.38	337.67	330.21	332.98	339.41	331.62	350.93	344.46
63	299.17	296.43	288.81	284.40	281.51	281.98	288.04	284.97	298.75	294.84
64	264.14	263.98	259.87	255.93	254.02	254.85	260.52	258.52	268.82	266.59
65	242.22	242.39	239.94	236.89	234.53	236.07	241.16	239.86	248.27	246.57
66	225.46	227.83	223.43	221.20	218.54	220.93	226.47	224.09	231.82	229.84
67	211.01	213.28	209.16	205.63	204.56	205.86	211.77	210.59	217.65	215.98
68	198.79	198.82	196.75	193.70	192.73	194.33	197.09	198.72	203.57	203.26
69	188.12	188.40	186.23	182.93	182.41	183.79	186.16	188.03	192.43	192.43
70	179.16	179.55	176.80	173.62	173.13	174.74	176.83	178.63	182.46	182.23
71	170.37	171.41	168.27	164.67	164.63	166.16	168.37	169.48	172.85	172.81
72	161.50	162.69	159.78	155.97	155.54	157.45	160.14	160.18	163.25	163.47
73	151.73	153.11	151.21	146.49	146.09	148.16	151.42	149.88	153.06	153.61
74	142.08	142.72	141.79	137.40	136.75	138.63	141.56	139.83	142.62	143.87
75	131.32	132.47	131.12	127.92	126.85	129.09	130.91	129.67	132.09	133.43
76	119.84	121.98	120.36	118.60	117.05	119.14	119.96	119.74	121.12	123.64
77	108.89	111.73	110.39	109.42	107.28	109.49	109.63	109.78	110.63	113.78
78	98.20	101.40	100.32	100.05	97.62	99.78	99.32	100.08	100.79	103.59
79	87.79	90.69	90.36	90.95	88.48	90.50	89.98	90.77	91.24	94.78
80	77.39	80.31	80.40	81.63	79.47	81.03	80.86	81.46	82.00	85.32
81	66.98	70.34	70.44	72.79	70.47	71.78	71.87	72.16	73.03	75.85
82	56.73	59.78	60.80	63.39	61.47	62.95	63.57	63.11	64.60	66.38
83	44.22	47.95	50.21	53.93	52.14	54.37	54.60	54.42	55.54	57.40
84	33.01	36.01	37.45	43.76	42.78	45.24	45.09	45.55	46.26	47.61
85	22.10	25.45	25.40	32.60	33.54	35.94	36.24	36.50	37.44	37.26
86	11.09	14.88	15.29	21.43	23.25	25.64	25.92	27.30	27.33	26.22
87	7.38	4.40	10.16	10.29	12.87	15.34	15.60	18.20	17.21	13.38
88	3.76	0.39	5.11	2.26	8.55	5.14	5.38	12.17	7.20	8.80
89	0.13	0.06	0.06	0.06	4.35	0.04	0.14	6.18	0.34	4.52
90	0.02	0.02	0.02	0.02	0.15	0.02	0.12	0.19	0.11	0.23
91	0.02	0.02	0.02	0.02	0.02	0.02	0.13	0.13	0.12	0.13
92	0.02	0.02	0.02	0.02	0.03	0.02	0.14	0.14	0.14	0.14
93	0.03	0.03	0.03	0.03	0.03	0.03	0.16	0.16	0.16	0.16
94	0.03	0.03	0.03	0.03	0.04	0.03	0.18	0.18	0.18	0.18
95	0.04	0.04	0.04	0.04	0.04	0.04	0.21	0.21	0.20	0.20
96	0.05	0.05	0.05	0.05	0.06	0.05	0.24	0.24	0.24	0.24
97	0.06	0.06	0.06	0.07	0.07	0.06	0.28	0.28	0.27	0.28
98	0.07	0.07	0.08	0.08	0.09	0.08	0.32	0.33	0.32	0.32
99	0.09	0.09	0.09	0.09	0.10	0.09	0.37	0.38	0.37	0.37
100	0.10	0.10	0.11	0.11	0.12	0.11	0.43	0.43	0.42	0.42
101	0.12	0.12	0.12	0.13	0.13	0.13	0.49	0.49	0.48	0.48
102	0.15	0.14	0.15	0.15	0.15	0.15	0.56	0.56	0.55	0.55
103	0.17	0.17	0.17	0.17	0.18	0.17	0.63	0.64	0.63	0.63
104	0.19	0.19	0.19	0.19	0.20	0.20	0.71	0.72	0.71	0.71
105	0.22	0.21	0.22	0.22	0.23	0.23	0.79	0.80	0.79	0.78
106	0.25	0.24	0.25	0.25	0.26	0.26	0.86	0.87	0.86	0.85
107	0.28	0.27	0.28	0.28	0.29	0.29	0.93	0.94	0.93	0.92
108	0.31	0.31	0.31	0.31	0.33	0.33	1.01	1.01	1.00	0.99
109	0.35	0.34	0.35	0.35	0.37	0.38	1.08	1.09	1.08	1.07

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110	0.39	0.38	0.39	0.39	0.42	0.42	1.16	1.17	1.15	1.15
111	0.44	0.42	0.44	0.44	0.46	0.48	1.25	1.25	1.24	1.22
112	0.49	0.46	0.49	0.49	0.51	0.53	1.33	1.34	1.32	1.31
113	0.54	0.50	0.54	0.55	0.56	0.59	1.43	1.43	1.41	1.39
114	0.60	0.56	0.60	0.61	0.62	0.66	1.52	1.53	1.50	1.47
115	0.67	0.62	0.67	0.67	0.70	0.72	1.62	1.63	1.60	1.56
116	0.73	0.70	0.74	0.74	0.78	0.80	1.72	1.73	1.69	1.65
117	0.81	0.77	0.81	0.82	0.86	0.87	1.83	1.83	1.80	1.75
118	0.88	0.85	0.89	0.89	0.95	0.94	1.94	1.94	1.90	1.86
119	0.96	0.93	0.97	0.97	1.03	1.01	2.05	2.05	2.01	1.98
120	1.05	1.01	1.05	1.06	1.12	1.08	2.16	2.17	2.13	2.09
121	1.13	1.10	1.14	1.15	1.22	1.15	2.29	2.28	2.26	2.20
122	1.22	1.19	1.23	1.24	1.32	1.22	2.41	2.41	2.38	2.31
123	1.31	1.28	1.32	1.33	1.41	1.31	2.54	2.57	2.50	2.43
124	1.41	1.37	1.40	1.43	1.52	1.40	2.69	2.72	2.63	2.56
125	1.50	1.47	1.50	1.52	1.62	1.51	2.90	2.88	2.78	2.70
126	1.60	1.56	1.60	1.61	1.72	1.64	3.10	3.05	2.93	2.85
127	1.69	1.66	1.71	1.71	1.83	1.76	3.28	3.22	3.09	3.01
128	1.79	1.76	1.82	1.80	1.95	1.89	3.45	3.39	3.26	3.16
129	1.90	1.87	1.94	1.89	2.06	2.01	3.62	3.56	3.43	3.31
130	2.02	1.99	2.06	1.99	2.17	2.14	3.78	3.72	3.59	3.46
131	2.15	2.11	2.17	2.09	2.28	2.26	3.94	3.87	3.74	3.62
132	2.28	2.24	2.28	2.20	2.38	2.40	4.10	4.03	3.89	3.77
133	2.42	2.38	2.39	2.29	2.47	2.53	4.25	4.18	4.02	3.91
134	2.55	2.53	2.50	2.38	2.56	2.65	4.40	4.32	4.15	4.06
135	2.68	2.66	2.62	2.48	2.66	2.76	4.53	4.46	4.28	4.20
136	2.80	2.78	2.76	2.62	2.78	2.87	4.65	4.59	4.42	4.34
137	2.92	2.93	2.88	2.80	2.91	2.99	4.76	4.70	4.56	4.49
138	3.05	3.08	2.99	2.98	3.05	3.12	4.88	4.82	4.71	4.63
139	3.19	3.22	3.11	3.13	3.18	3.25	5.03	4.93	4.85	4.78
140	3.31	3.37	3.25	3.26	3.30	3.38	5.16	5.05	4.98	4.91
141	3.43	3.51	3.40	3.36	3.42	3.49	5.31	5.18	5.13	5.07
142	3.54	3.65	3.54	3.46	3.56	3.59	5.46	5.30	5.30	5.21
143	3.65	3.78	3.69	3.58	3.71	3.69	5.61	5.41	5.46	5.35
144	3.76	3.91	3.84	3.71	3.85	3.79	5.78	5.53	5.60	5.48
145	3.89	4.04	3.98	3.85	3.96	3.89	5.93	5.68	5.72	5.64
146	4.00	4.17	4.11	3.97	4.05	4.00	6.08	5.88	5.86	5.79
147	4.12	4.30	4.21	4.09	4.11	4.11	6.24	6.10	5.99	5.96
148	4.23	4.40	4.31	4.21	4.16	4.22	6.39	6.29	6.11	6.13
149	4.33	4.50	4.43	4.32	4.21	4.31	6.53	6.43	6.23	6.29
150	4.44	4.61	4.57	4.42	4.26	4.39	6.59	6.56	6.35	6.47
151	4.56	4.72	4.71	4.52	4.33	4.45	6.65	6.66	6.46	6.62
152	4.68	4.85	4.86	4.60	4.41	4.50	6.76	6.76	6.59	6.73
153	4.78	4.95	4.99	4.67	4.50	4.57	6.87	6.87	6.77	6.84
154	4.86	5.05	5.11	4.74	4.60	4.65	6.96	6.99	6.93	6.94
155	4.95	5.15	5.21	4.80	4.68	4.72	7.02	7.10	7.06	7.05
156	5.05	5.25	5.29	4.86	4.73	4.78	7.07	7.17	7.18	7.14
157	5.16	5.34	5.36	4.94	4.77	4.81	7.14	7.21	7.25	7.22
158	5.27	5.43	5.40	5.02	4.83	4.82	7.21	7.27	7.31	7.30
159	5.36	5.50	5.41	5.11	4.87	4.83	7.28	7.36	7.37	7.40
160	5.40	5.53	5.43	5.20	4.91	4.85	7.35	7.42	7.43	7.51
161	5.43	5.55	5.45	5.28	4.97	4.89	7.39	7.43	7.48	7.59
162	5.43	5.57	5.48	5.35	5.03	4.93	7.41	7.40	7.50	7.60
163	5.47	5.63	5.54	5.44	5.10	5.02	7.46	7.39	7.50	7.59
164	5.54	5.72	5.61	5.55	5.21	5.15	7.55	7.42	7.52	7.59
165	5.61	5.80	5.70	5.65	5.33	5.31	7.61	7.50	7.53	7.60

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CANDELA TABULATION - (Cont.)

166	5.69	5.91	5.82	5.80	5.49	5.47	7.65	7.58	7.54	7.60
167	5.80	5.99	5.93	5.90	5.60	5.57	7.65	7.54	7.51	7.58
168	5.89	6.07	6.02	5.97	5.63	5.61	7.63	7.51	7.42	7.53
169	5.97	6.13	6.11	6.04	5.64	5.65	7.57	7.48	7.33	7.51
170	5.99	6.13	6.12	6.07	5.63	5.68	7.50	7.49	7.19	7.43
171	5.98	6.13	6.11	6.07	5.64	5.73	7.44	7.52	7.16	7.44
172	6.05	6.20	6.17	6.16	5.76	5.82	7.33	7.53	7.19	7.45
173	6.20	6.35	6.31	6.31	5.92	5.96	7.21	7.49	7.16	7.42
174	6.48	6.63	6.59	6.58	6.22	6.23	7.12	7.42	7.13	7.40
175	6.77	6.93	6.89	6.86	6.52	6.49	7.12	7.30	7.09	7.38
176	6.93	7.15	7.05	7.03	6.70	6.69	7.14	7.18	7.04	7.28
177	7.03	7.24	7.17	7.16	6.85	6.86	7.12	7.07	7.00	7.20
178	7.06	7.25	7.22	7.21	6.97	6.95	7.02	6.86	6.91	7.06
179	7.11	7.28	7.27	7.27	7.05	7.03	7.01	6.78	6.89	6.98
180	7.19	7.19	7.19	7.19	7.19	7.19	7.19	7.19	7.19	7.19

Vert. Angles **Horizontal Angles**

	<u>150</u>	<u>165</u>	<u>180</u>	<u>195</u>	<u>210</u>	<u>225</u>	<u>240</u>	<u>255</u>	<u>270</u>	<u>285</u>
0	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26	8363.26
1	8370.90	8372.82	8377.07	8375.06	8373.42	8372.40	8371.94	8368.76	8363.61	8360.92
2	8378.41	8381.62	8389.33	8389.43	8385.90	8383.06	8376.80	8370.26	8365.32	8361.97
3	8389.33	8394.44	8401.90	8398.28	8397.29	8394.29	8382.02	8378.50	8367.03	8363.64
4	8402.53	8407.00	8414.03	8413.82	8408.91	8406.52	8393.65	8383.73	8373.88	8363.42
5	8413.22	8420.94	8431.30	8426.43	8426.12	8417.03	8405.74	8395.72	8378.91	8366.76
6	8426.12	8433.83	8441.57	8441.66	8435.93	8429.19	8414.87	8401.10	8384.00	8369.25
7	8438.06	8448.83	8455.55	8455.75	8450.73	8441.02	8431.04	8413.44	8389.95	8373.02
8	8453.20	8461.63	8472.41	8469.69	8463.72	8453.61	8440.85	8420.38	8397.37	8379.12
9	8465.92	8475.36	8485.92	8484.05	8479.96	8468.33	8451.19	8432.04	8405.98	8386.35
10	8479.85	8491.35	8499.38	8500.74	8494.03	8483.46	8464.36	8438.89	8415.18	8391.14
11	8494.10	8508.27	8518.84	8514.66	8508.67	8495.45	8478.66	8454.86	8422.11	8395.33
12	8508.58	8520.86	8534.95	8530.47	8523.50	8511.20	8487.86	8464.22	8430.83	8401.59
13	8520.14	8535.21	8552.02	8545.05	8541.14	8524.77	8502.82	8476.35	8440.04	8408.39
14	8534.10	8551.28	8564.16	8560.11	8556.95	8538.02	8515.99	8486.52	8449.12	8416.91
15	8550.59	8564.78	8579.35	8577.00	8568.76	8550.94	8530.51	8497.65	8459.22	8424.64
16	8562.17	8577.46	8592.55	8588.77	8582.72	8567.74	8540.74	8509.87	8470.49	8434.32
17	8576.43	8593.05	8606.46	8606.44	8597.13	8578.53	8553.02	8521.26	8477.32	8439.79
18	8590.35	8605.54	8619.49	8617.31	8612.68	8589.13	8563.77	8532.79	8487.71	8450.13
19	8599.82	8622.24	8633.61	8629.88	8621.74	8602.50	8575.82	8541.68	8495.82	8454.67
20	8613.03	8630.64	8642.44	8640.71	8636.28	8614.43	8586.03	8550.84	8507.09	8465.89
21	8622.73	8638.79	8653.66	8649.90	8646.09	8624.37	8596.24	8559.10	8514.22	8472.73
22	8631.38	8648.23	8660.64	8657.68	8653.86	8627.89	8602.91	8568.03	8522.13	8483.19
23	8639.07	8653.98	8667.03	8661.42	8659.01	8634.81	8609.13	8574.58	8529.67	8491.61
24	8640.89	8658.90	8667.72	8664.59	8660.36	8641.49	8613.56	8580.59	8535.16	8495.38
25	8645.85	8658.22	8668.04	8665.96	8657.98	8640.49	8614.57	8581.71	8537.56	8501.22
26	8640.07	8656.82	8661.75	8660.15	8659.50	8640.47	8614.08	8583.11	8538.94	8502.92
27	8631.38	8647.04	8653.06	8652.73	8643.63	8632.39	8605.36	8578.43	8538.30	8502.77
28	8621.36	8629.79	8639.67	8638.80	8632.85	8620.44	8596.96	8571.95	8531.27	8497.62
29	8601.03	8611.87	8619.55	8615.34	8618.35	8601.44	8583.56	8557.74	8516.05	8491.05
30	8575.09	8580.14	8593.42	8588.42	8588.58	8578.70	8562.29	8541.73	8498.00	8477.26
31	8540.54	8542.77	8552.42	8552.68	8557.00	8546.09	8532.82	8514.81	8476.33	8455.87
32	8495.33	8496.48	8505.70	8506.73	8513.37	8507.17	8497.79	8478.08	8446.15	8427.73
33	8439.92	8442.49	8452.73	8450.14	8462.42	8453.66	8447.72	8434.82	8403.39	8390.97
34	8372.90	8372.59	8382.45	8381.44	8391.91	8389.98	8385.92	8377.66	8353.61	8347.36
35	8290.62	8287.61	8298.78	8298.99	8315.70	8313.97	8312.43	8307.45	8287.84	8285.98
36	8194.85	8190.86	8198.83	8196.88	8221.12	8221.71	8229.58	8228.34	8208.26	8213.56

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CANDELA TABULATION - (Cont.)

37	8084.64	8072.19	8077.60	8081.83	8105.22	8113.27	8125.99	8128.03	8110.95	8125.73
38	7944.39	7935.91	7950.75	7946.59	7974.40	7988.73	8001.86	8007.46	7998.72	8016.99
39	7788.34	7779.22	7789.44	7789.81	7822.20	7840.71	7863.83	7870.05	7860.96	7885.31
40	7609.99	7596.37	7604.57	7610.45	7646.05	7665.32	7694.83	7704.49	7701.56	7730.28
41	7406.70	7388.17	7402.53	7405.74	7444.91	7461.15	7494.20	7510.40	7509.22	7550.46
42	7173.17	7155.20	7165.13	7169.05	7211.73	7228.78	7264.39	7281.65	7282.32	7330.36
43	6911.52	6890.19	6901.41	6905.66	6949.17	6961.91	6995.80	7021.65	7038.75	7081.89
44	6620.34	6596.86	6603.33	6611.63	6656.96	6666.38	6696.58	6727.00	6746.67	6793.83
45	6299.80	6268.05	6280.87	6278.65	6332.66	6335.83	6361.83	6390.11	6418.14	6466.81
46	5945.96	5915.83	5931.91	5927.17	5977.06	5976.46	6004.75	6029.41	6033.87	6099.86
47	5554.05	5527.43	5542.17	5546.48	5601.66	5579.95	5609.30	5632.39	5647.15	5701.22
48	5139.77	5112.62	5144.28	5138.95	5191.67	5168.64	5203.50	5218.55	5221.75	5282.89
49	4703.67	4685.61	4713.80	4721.00	4770.73	4745.76	4777.36	4787.98	4791.77	4834.40
50	4259.31	4243.86	4277.45	4290.73	4335.69	4312.10	4342.65	4354.55	4347.65	4387.67
51	3806.92	3806.64	3840.04	3854.43	3899.78	3880.85	3911.79	3908.84	3899.45	3940.43
52	3364.35	3367.71	3399.09	3419.78	3461.21	3452.34	3480.31	3481.37	3457.79	3497.63
53	2928.61	2940.58	2965.18	2991.04	3032.29	3033.48	3062.35	3057.37	3027.56	3068.11
54	2505.13	2512.94	2546.56	2566.76	2609.42	2614.02	2640.52	2638.45	2608.01	2650.74
55	2127.86	2100.85	2162.74	2153.06	2227.24	2209.60	2257.53	2234.44	2213.57	2275.26
56	1750.59	1714.64	1778.93	1760.45	1845.05	1823.30	1874.53	1846.50	1834.02	1899.77
57	1373.81	1356.20	1397.23	1405.25	1463.16	1454.39	1491.88	1478.70	1477.35	1524.88
58	1057.11	1042.32	1084.59	1085.03	1133.38	1134.13	1168.59	1164.73	1161.38	1203.86
59	792.23	844.88	821.48	885.17	857.31	928.23	905.63	900.86	902.56	929.27
60	596.18	648.02	625.53	686.91	657.00	724.81	700.47	719.73	715.04	710.56
61	454.41	451.30	482.99	488.64	514.00	521.38	547.05	539.23	529.06	544.88
62	361.84	363.78	389.12	391.45	413.54	417.19	441.30	429.87	420.17	423.56
63	308.19	310.10	328.32	327.45	344.11	345.90	366.33	354.86	345.41	340.97
64	275.14	276.14	289.19	286.24	297.75	297.46	310.77	301.56	293.80	286.57
65	252.47	253.07	262.38	259.05	266.36	264.47	272.57	264.98	260.06	254.65
66	234.34	235.69	243.85	240.15	243.92	241.19	246.17	240.09	236.27	236.78
67	219.30	220.98	230.05	225.11	229.63	224.29	229.98	222.15	218.06	218.91
68	204.36	208.21	216.24	212.91	215.35	210.29	213.79	207.31	203.10	201.05
69	193.14	196.98	202.44	202.16	201.22	199.86	197.76	195.67	191.46	189.49
70	182.70	186.16	191.43	192.27	191.79	190.14	187.37	185.69	181.39	179.61
71	172.86	176.03	181.65	183.18	182.71	181.69	178.74	177.68	173.07	171.05
72	163.87	166.25	172.08	174.56	175.39	174.52	171.19	170.15	166.11	164.15
73	154.71	156.37	161.72	164.61	166.62	164.86	161.41	160.46	159.49	156.03
74	145.55	146.90	151.62	154.42	157.26	154.92	151.87	150.93	151.18	145.85
75	135.75	136.99	140.78	144.03	147.87	144.68	141.85	140.56	139.68	135.09
76	125.76	127.33	129.97	133.52	135.69	133.02	130.78	129.95	127.71	125.14
77	115.48	117.88	118.93	123.59	124.08	122.58	119.48	119.64	116.46	115.93
78	105.42	107.72	108.06	112.83	112.95	111.98	108.51	109.29	105.97	106.40
79	95.40	97.76	97.49	102.11	102.02	101.93	98.49	99.75	95.93	96.71
80	85.86	87.34	86.44	91.00	91.69	92.01	88.68	90.21	86.69	87.23
81	76.09	76.90	76.51	79.90	81.46	82.08	79.20	80.67	77.47	77.90
82	66.51	66.46	66.61	68.79	71.27	72.16	70.12	71.13	68.26	68.58
83	56.90	55.97	55.69	58.04	61.22	62.39	61.08	62.23	59.47	59.89
84	46.19	43.71	42.67	45.01	49.89	52.61	51.50	52.98	49.38	51.04
85	34.57	31.53	31.63	31.86	36.86	41.31	41.95	42.86	40.30	41.45
86	22.95	19.72	20.60	20.98	26.09	29.02	31.65	33.65	30.91	29.72
87	11.37	8.69	9.64	10.23	15.32	17.26	21.36	23.67	21.14	17.99
88	3.01	4.38	2.17	5.17	4.67	11.52	11.07	10.86	5.08	6.39
89	0.16	0.21	0.17	0.29	0.37	5.85	1.33	5.46	2.51	0.05
90	0.11	0.12	0.12	0.12	0.12	0.18	0.11	0.25	0.10	0.02
91	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.12	0.02	0.02
92	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.13	0.03	0.02

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CANDELA TABULATION - (Cont.)

93	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.03	0.03
94	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.03	0.03
95	0.20	0.20	0.19	0.19	0.19	0.19	0.18	0.19	0.04	0.04
96	0.23	0.23	0.22	0.22	0.22	0.22	0.21	0.22	0.05	0.05
97	0.27	0.27	0.26	0.26	0.25	0.26	0.25	0.25	0.06	0.06
98	0.31	0.31	0.30	0.30	0.29	0.30	0.29	0.29	0.07	0.07
99	0.36	0.36	0.35	0.35	0.34	0.34	0.34	0.34	0.09	0.08
100	0.42	0.41	0.40	0.40	0.39	0.40	0.39	0.40	0.10	0.10
101	0.47	0.47	0.46	0.46	0.45	0.45	0.45	0.45	0.12	0.12
102	0.54	0.53	0.53	0.52	0.52	0.52	0.52	0.52	0.14	0.14
103	0.62	0.61	0.60	0.60	0.59	0.59	0.59	0.60	0.17	0.16
104	0.69	0.69	0.68	0.68	0.67	0.67	0.67	0.67	0.19	0.18
105	0.77	0.76	0.75	0.75	0.74	0.75	0.74	0.75	0.22	0.21
106	0.84	0.83	0.82	0.82	0.81	0.82	0.81	0.82	0.25	0.24
107	0.90	0.89	0.88	0.88	0.88	0.88	0.88	0.88	0.28	0.27
108	0.97	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.32	0.31
109	1.04	1.03	1.02	1.02	1.02	1.03	1.03	1.03	0.37	0.36
110	1.11	1.09	1.08	1.09	1.09	1.11	1.10	1.11	0.42	0.41
111	1.18	1.16	1.15	1.15	1.16	1.18	1.19	1.20	0.47	0.46
112	1.26	1.23	1.21	1.22	1.24	1.27	1.27	1.29	0.53	0.52
113	1.33	1.30	1.28	1.30	1.32	1.35	1.36	1.38	0.59	0.58
114	1.41	1.38	1.36	1.37	1.40	1.44	1.45	1.47	0.66	0.65
115	1.49	1.45	1.43	1.46	1.48	1.53	1.55	1.57	0.73	0.72
116	1.59	1.54	1.51	1.55	1.58	1.63	1.65	1.67	0.80	0.79
117	1.69	1.66	1.62	1.66	1.69	1.74	1.75	1.78	0.88	0.87
118	1.80	1.78	1.79	1.79	1.82	1.85	1.86	1.89	0.95	0.95
119	1.91	1.89	1.89	1.91	1.93	1.98	1.98	2.00	1.04	1.03
120	2.03	2.01	2.00	2.02	2.04	2.10	2.11	2.12	1.12	1.12
121	2.15	2.12	2.10	2.14	2.16	2.22	2.23	2.24	1.21	1.21
122	2.26	2.23	2.21	2.25	2.27	2.35	2.37	2.37	1.30	1.30
123	2.37	2.35	2.33	2.38	2.39	2.48	2.52	2.53	1.39	1.39
124	2.49	2.47	2.46	2.51	2.52	2.62	2.68	2.71	1.48	1.48
125	2.63	2.60	2.59	2.64	2.65	2.76	2.83	2.88	1.57	1.57
126	2.77	2.73	2.73	2.78	2.80	2.91	2.99	3.05	1.66	1.66
127	2.91	2.87	2.88	2.92	2.95	3.06	3.15	3.23	1.76	1.76
128	3.07	3.02	3.02	3.08	3.12	3.22	3.32	3.40	1.85	1.85
129	3.23	3.17	3.17	3.25	3.30	3.37	3.50	3.58	1.96	1.95
130	3.39	3.34	3.33	3.42	3.47	3.55	3.68	3.75	2.06	2.06
131	3.55	3.51	3.50	3.57	3.64	3.72	3.85	3.93	2.17	2.17
132	3.71	3.67	3.65	3.73	3.80	3.89	4.01	4.10	2.29	2.29
133	3.85	3.80	3.77	3.88	3.96	4.07	4.17	4.26	2.42	2.42
134	3.98	3.93	3.89	4.02	4.10	4.24	4.33	4.40	2.53	2.53
135	4.11	4.05	4.02	4.16	4.24	4.39	4.48	4.52	2.62	2.64
136	4.22	4.19	4.16	4.29	4.37	4.54	4.63	4.64	2.72	2.74
137	4.34	4.33	4.28	4.42	4.51	4.69	4.77	4.78	2.85	2.84
138	4.48	4.47	4.41	4.56	4.64	4.84	4.92	4.91	2.97	2.95
139	4.64	4.64	4.57	4.70	4.77	4.98	5.05	5.03	3.09	3.07
140	4.78	4.80	4.70	4.83	4.90	5.11	5.18	5.17	3.22	3.18
141	4.92	4.95	4.84	4.98	5.05	5.25	5.33	5.31	3.36	3.30
142	5.08	5.11	4.99	5.13	5.21	5.38	5.49	5.45	3.47	3.44
143	5.22	5.28	5.15	5.29	5.36	5.52	5.65	5.60	3.58	3.57
144	5.37	5.43	5.30	5.46	5.51	5.66	5.81	5.75	3.68	3.72
145	5.52	5.63	5.50	5.63	5.65	5.81	5.95	5.92	3.81	3.85
146	5.67	5.78	5.66	5.80	5.78	5.96	6.08	6.07	3.92	3.97
147	5.84	5.91	5.81	5.94	5.91	6.13	6.22	6.21	4.01	4.06
148	5.98	6.04	5.97	6.07	6.04	6.29	6.36	6.35	4.06	4.14

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

149	6.19	6.20	6.11	6.18	6.20	6.46	6.49	6.48	4.11	4.19
150	6.38	6.34	6.25	6.28	6.37	6.62	6.63	6.61	4.17	4.26
151	6.57	6.49	6.39	6.40	6.55	6.76	6.77	6.73	4.25	4.34
152	6.77	6.63	6.51	6.53	6.72	6.89	6.89	6.85	4.33	4.45
153	6.95	6.74	6.62	6.67	6.92	7.02	7.00	6.98	4.40	4.54
154	7.13	6.86	6.76	6.80	7.11	7.15	7.13	7.10	4.43	4.62
155	7.31	6.98	6.89	6.95	7.27	7.27	7.25	7.20	4.44	4.69
156	7.46	7.13	7.04	7.13	7.42	7.40	7.36	7.27	4.47	4.77
157	7.58	7.29	7.22	7.30	7.55	7.54	7.46	7.37	4.50	4.84
158	7.66	7.45	7.40	7.47	7.64	7.69	7.56	7.47	4.54	4.91
159	7.71	7.59	7.56	7.60	7.72	7.81	7.66	7.57	4.58	4.98
160	7.74	7.67	7.68	7.68	7.79	7.93	7.75	7.66	4.61	5.02
161	7.74	7.70	7.70	7.72	7.83	7.99	7.82	7.71	4.64	5.06
162	7.73	7.71	7.69	7.73	7.83	8.02	7.86	7.74	4.70	5.12
163	7.72	7.70	7.69	7.73	7.84	8.04	7.92	7.74	4.81	5.19
164	7.71	7.73	7.70	7.77	7.87	8.07	7.98	7.77	4.97	5.29
165	7.73	7.74	7.71	7.83	7.94	8.12	8.05	7.81	5.15	5.40
166	7.73	7.73	7.71	7.89	8.01	8.16	8.11	7.83	5.31	5.53
167	7.72	7.71	7.74	7.91	8.04	8.15	8.10	7.81	5.42	5.65
168	7.71	7.68	7.74	7.91	8.03	8.11	8.08	7.73	5.51	5.72
169	7.65	7.59	7.72	7.87	7.98	8.04	8.00	7.62	5.61	5.71
170	7.58	7.53	7.69	7.81	7.92	8.00	7.94	7.56	5.66	5.62
171	7.58	7.55	7.68	7.81	7.92	7.96	7.91	7.52	5.68	5.53
172	7.58	7.58	7.69	7.82	7.91	7.91	7.87	7.55	5.73	5.64
173	7.53	7.55	7.65	7.79	7.86	7.82	7.81	7.52	5.82	5.81
174	7.50	7.55	7.65	7.80	7.84	7.77	7.77	7.47	6.00	6.03
175	7.44	7.53	7.63	7.77	7.81	7.72	7.73	7.38	6.18	6.28
176	7.32	7.44	7.56	7.71	7.74	7.64	7.66	7.33	6.33	6.42
177	7.21	7.34	7.49	7.65	7.66	7.57	7.54	7.28	6.48	6.52
178	7.05	7.19	7.36	7.50	7.50	7.44	7.37	7.17	6.64	6.56
179	6.98	7.13	7.27	7.41	7.41	7.37	7.28	7.13	6.85	6.63
180	7.19	7.19	7.19	7.19	7.19	7.19	7.19	7.19	7.19	7.19

Vert. Angles **Horizontal Angles**

	300	315	330	345	360
0	8363.26	8363.26	8363.26	8363.26	8363.26
1	8359.09	8361.04	8351.17	8349.78	8353.45
2	8355.61	8353.95	8342.09	8341.41	8344.99
3	8355.88	8349.06	8336.47	8333.36	8335.20
4	8355.55	8344.61	8333.71	8330.19	8328.10
5	8351.87	8340.93	8326.79	8323.20	8319.65
6	8353.13	8340.91	8321.34	8316.43	8319.04
7	8357.25	8340.31	8320.21	8313.55	8312.54
8	8361.37	8342.25	8318.83	8308.87	8310.12
9	8362.38	8340.61	8316.42	8308.17	8306.32
10	8365.09	8343.37	8316.41	8307.15	8303.18
11	8368.17	8345.07	8316.76	8306.80	8300.11
12	8376.24	8347.24	8317.10	8306.44	8301.08
13	8381.61	8351.36	8319.45	8303.71	8299.73
14	8388.43	8355.07	8320.86	8306.88	8302.77
15	8392.59	8359.76	8323.57	8309.93	8304.18
16	8399.79	8366.94	8328.04	8312.72	8302.12
17	8408.46	8373.80	8333.78	8317.87	8307.88
18	8416.67	8379.56	8338.76	8324.13	8310.67
19	8422.51	8385.25	8345.22	8329.65	8318.57

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CANDELA TABULATION - (Cont.)

20	8429.29	8394.50	8350.47	8334.48	8321.03
21	8438.49	8402.02	8357.71	8341.06	8327.52
22	8440.79	8407.50	8364.92	8349.24	8335.11
23	8451.55	8418.80	8374.06	8355.53	8342.81
24	8457.27	8425.31	8381.99	8362.79	8348.97
25	8465.94	8432.84	8388.02	8371.03	8357.83
26	8471.34	8434.95	8393.76	8376.85	8363.84
27	8472.71	8438.30	8395.23	8378.54	8366.66
28	8468.76	8436.57	8396.28	8379.22	8367.37
29	8459.44	8433.45	8390.53	8376.60	8365.36
30	8450.02	8425.21	8380.99	8367.69	8355.04
31	8431.33	8409.35	8368.38	8352.49	8343.03
32	8404.24	8386.98	8346.44	8334.44	8323.67
33	8372.99	8355.70	8315.21	8305.99	8296.02
34	8330.24	8312.28	8278.38	8268.12	8256.17
35	8270.26	8261.05	8225.39	8218.34	8209.06
36	8200.44	8194.74	8160.44	8153.53	8145.18
37	8112.83	8114.37	8080.99	8074.44	8065.41
38	8009.78	8008.71	7978.93	7975.41	7969.42
39	7879.09	7884.73	7854.51	7854.48	7847.97
40	7723.34	7734.26	7702.82	7707.03	7700.07
41	7541.60	7557.09	7526.92	7532.14	7521.67
42	7324.66	7343.86	7317.34	7321.79	7308.43
43	7075.23	7098.80	7069.38	7073.39	7062.70
44	6782.46	6810.08	6784.53	6785.63	6771.87
45	6458.32	6484.33	6460.28	6454.06	6445.00
46	6088.68	6118.35	6092.21	6080.50	6066.32
47	5681.77	5709.91	5679.43	5668.74	5646.51
48	5254.24	5276.50	5233.50	5218.43	5204.39
49	4800.61	4810.19	4766.19	4741.71	4734.28
50	4346.56	4347.30	4293.39	4266.89	4255.99
51	3887.11	3890.18	3828.37	3797.77	3790.21
52	3445.60	3443.56	3382.28	3357.03	3346.03
53	3012.58	3012.06	2951.78	2928.64	2918.90
54	2594.30	2596.74	2536.54	2527.23	2502.21
55	2193.16	2235.35	2157.99	2174.70	2116.61
56	1816.35	1873.96	1801.07	1822.17	1745.32
57	1465.83	1512.95	1472.47	1470.59	1408.38
58	1161.02	1198.04	1161.70	1161.34	1104.09
59	889.85	921.57	903.51	889.20	891.16
60	699.75	700.70	703.82	671.47	679.72
61	511.40	527.49	505.87	502.46	468.27
62	398.98	401.62	388.36	381.79	362.50
63	322.98	321.91	313.53	307.32	299.17
64	276.79	275.21	270.12	266.30	264.14
65	248.61	248.16	244.10	242.04	242.22
66	228.84	231.71	225.34	227.12	225.46
67	213.05	215.27	209.95	212.19	211.01
68	199.26	198.99	196.76	197.30	198.79
69	187.92	187.51	186.21	186.94	188.12
70	177.51	177.65	176.42	177.60	179.16
71	167.85	168.26	167.45	169.11	170.37
72	159.54	159.27	159.25	160.62	161.50
73	151.18	150.14	150.31	151.25	151.73
74	142.57	140.90	141.25	141.45	142.08
75	132.68	131.26	131.14	131.31	131.32

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CANDELA TABULATION - (Cont.)

76	122.14	121.67	120.75	121.35	119.84
77	111.70	112.35	110.65	111.43	108.89
78	101.86	102.68	100.53	101.13	98.20
79	93.36	93.36	90.76	91.43	87.79
80	83.45	83.86	80.99	81.02	77.39
81	73.55	74.60	71.22	71.04	66.98
82	64.82	65.28	61.59	60.82	56.73
83	55.98	56.31	51.83	49.56	44.22
84	46.42	46.73	40.17	37.48	33.01
85	37.46	35.93	27.93	26.36	22.10
86	27.90	24.79	16.39	15.25	11.09
87	16.36	13.66	10.84	4.21	7.38
88	10.87	2.78	5.46	0.38	3.76
89	5.50	0.04	0.08	0.04	0.13
90	0.14	0.02	0.02	0.02	0.02
91	0.02	0.02	0.02	0.02	0.02
92	0.02	0.02	0.02	0.02	0.02
93	0.03	0.03	0.03	0.03	0.03
94	0.03	0.03	0.03	0.03	0.03
95	0.04	0.04	0.04	0.04	0.04
96	0.05	0.05	0.05	0.05	0.05
97	0.06	0.06	0.06	0.06	0.06
98	0.07	0.07	0.07	0.07	0.07
99	0.09	0.09	0.09	0.08	0.09
100	0.10	0.10	0.11	0.10	0.10
101	0.12	0.12	0.12	0.12	0.12
102	0.14	0.14	0.14	0.14	0.15
103	0.17	0.16	0.17	0.16	0.17
104	0.19	0.19	0.19	0.18	0.19
105	0.22	0.21	0.22	0.21	0.22
106	0.24	0.24	0.25	0.24	0.25
107	0.28	0.28	0.28	0.27	0.28
108	0.32	0.31	0.32	0.31	0.31
109	0.36	0.36	0.36	0.35	0.35
110	0.41	0.41	0.41	0.39	0.39
111	0.47	0.46	0.45	0.44	0.44
112	0.52	0.51	0.51	0.49	0.49
113	0.59	0.57	0.56	0.54	0.54
114	0.65	0.63	0.62	0.60	0.60
115	0.72	0.70	0.69	0.67	0.67
116	0.80	0.77	0.76	0.74	0.73
117	0.88	0.85	0.83	0.81	0.81
118	0.96	0.93	0.91	0.89	0.88
119	1.04	1.01	1.00	0.97	0.96
120	1.12	1.09	1.09	1.05	1.05
121	1.21	1.17	1.17	1.13	1.13
122	1.30	1.26	1.27	1.22	1.22
123	1.38	1.35	1.36	1.30	1.31
124	1.47	1.43	1.45	1.39	1.41
125	1.56	1.52	1.54	1.47	1.50
126	1.65	1.61	1.63	1.57	1.60
127	1.74	1.70	1.73	1.67	1.69
128	1.84	1.79	1.82	1.78	1.79
129	1.95	1.88	1.93	1.90	1.90
130	2.06	1.98	2.03	2.02	2.02
131	2.16	2.08	2.13	2.13	2.15

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

132	2.27	2.18	2.23	2.26	2.28
133	2.38	2.30	2.34	2.38	2.42
134	2.49	2.42	2.44	2.51	2.55
135	2.59	2.55	2.54	2.62	2.68
136	2.69	2.67	2.63	2.74	2.80
137	2.80	2.80	2.75	2.86	2.92
138	2.92	2.94	2.86	2.98	3.05
139	3.04	3.06	2.98	3.11	3.19
140	3.16	3.18	3.10	3.22	3.31
141	3.30	3.28	3.22	3.34	3.43
142	3.44	3.40	3.35	3.47	3.54
143	3.60	3.51	3.48	3.59	3.65
144	3.72	3.62	3.61	3.72	3.76
145	3.83	3.75	3.72	3.84	3.89
146	3.91	3.88	3.83	3.96	4.00
147	4.00	4.00	3.95	4.07	4.12
148	4.07	4.12	4.05	4.17	4.23
149	4.16	4.23	4.17	4.26	4.33
150	4.26	4.34	4.32	4.35	4.44
151	4.38	4.46	4.47	4.45	4.56
152	4.49	4.57	4.64	4.55	4.68
153	4.59	4.67	4.79	4.62	4.78
154	4.69	4.76	4.92	4.71	4.86
155	4.78	4.84	5.05	4.83	4.95
156	4.85	4.93	5.15	4.97	5.05
157	4.93	5.04	5.22	5.10	5.16
158	5.01	5.15	5.29	5.22	5.27
159	5.07	5.25	5.32	5.28	5.36
160	5.14	5.34	5.35	5.32	5.40
161	5.21	5.42	5.37	5.35	5.43
162	5.27	5.46	5.38	5.38	5.43
163	5.37	5.52	5.42	5.43	5.47
164	5.47	5.58	5.48	5.52	5.54
165	5.59	5.66	5.58	5.61	5.61
166	5.71	5.76	5.70	5.74	5.69
167	5.79	5.82	5.79	5.85	5.80
168	5.86	5.85	5.86	5.93	5.89
169	5.88	5.87	5.90	5.97	5.97
170	5.82	5.86	5.88	5.95	5.99
171	5.81	5.84	5.85	5.93	5.98
172	5.89	5.88	5.91	6.00	6.05
173	6.02	6.01	6.02	6.14	6.20
174	6.23	6.25	6.27	6.40	6.48
175	6.48	6.50	6.55	6.68	6.77
176	6.65	6.63	6.71	6.87	6.93
177	6.76	6.73	6.81	6.96	7.03
178	6.79	6.80	6.83	6.98	7.06
179	6.77	6.85	6.87	7.04	7.11
180	7.19	7.19	7.19	7.19	7.19

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3194.69	16.30	16.30
0-30	7132.45	36.50	36.50
0-40	12276.12	62.80	62.80
0-60	19062.5	97.50	97.50
0-80	19495.19	99.70	99.70
0-90	19534.54	99.90	99.90
10-90	18734.3	95.80	95.80
20-40	9081.43	46.50	46.50
20-50	13875.71	71.00	71.00
40-70	7077.58	36.20	36.20
60-80	432.69	2.20	2.20
70-80	141.49	0.70	0.70
80-90	39.34	0.20	0.20
90-110	0.67	0.00	0.00
90-120	1.79	0.00	0.00
90-130	3.71	0.00	0.00
90-150	9.35	0.00	0.00
90-180	14.62	0.10	0.10
110-180	13.95	0.10	0.10
0-180	19549.16	100.00	100.00

Total Luminaire Efficiency = 100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	800.23
10-20	2394.45
20-30	3937.77
30-40	5143.67
40-50	4794.28
50-60	1992.1
60-70	291.20
70-80	141.49
80-90	39.34
90-100	0.15
100-110	0.52
110-120	1.12
120-130	1.92
130-140	2.66
140-150	2.98
150-160	2.74
160-170	1.87
170-180	0.66

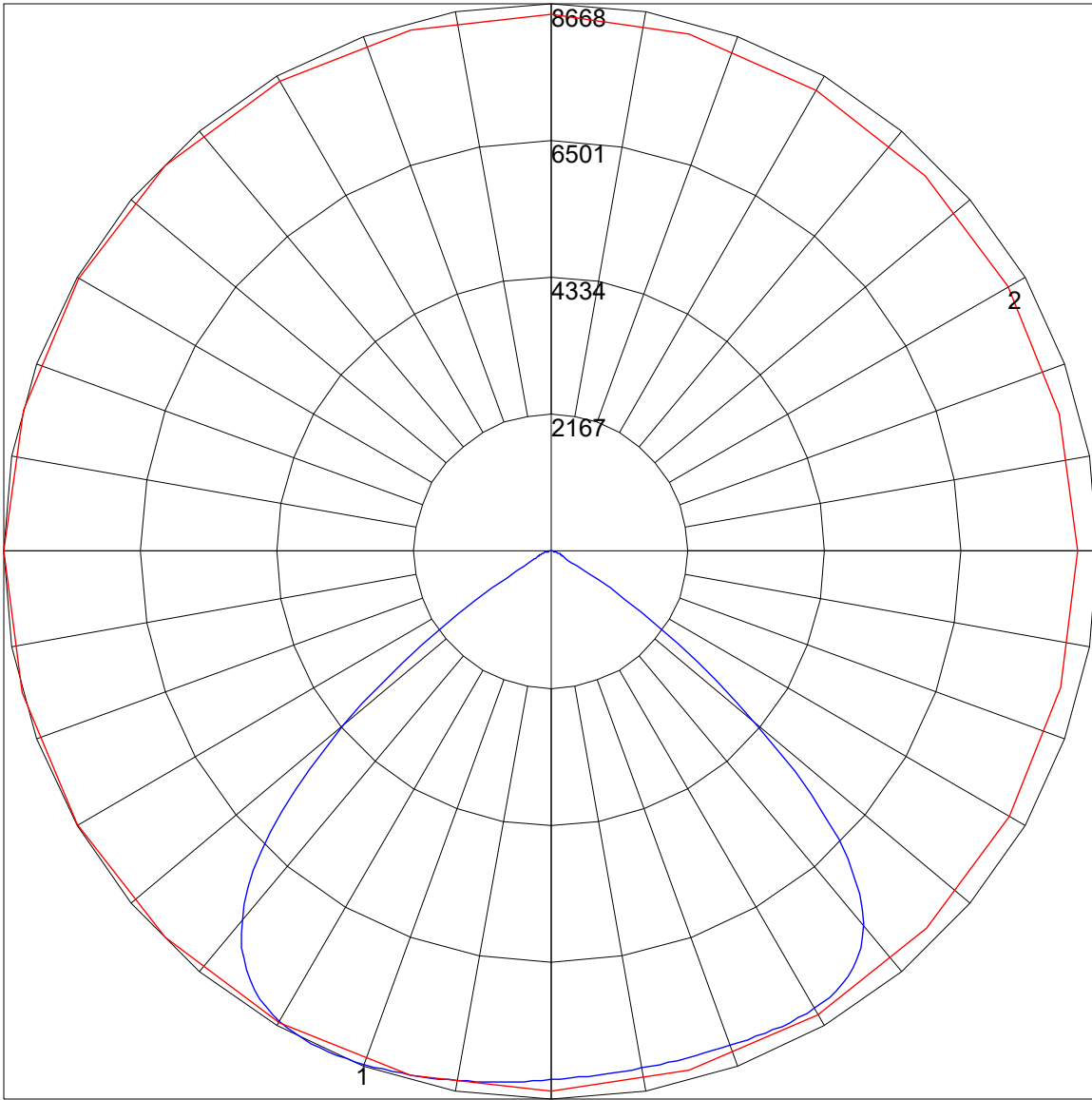
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HBRMSR-LED135DHV50.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	57	66	61	57	55
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32

POLAR GRAPH



Maximum Candela = 8668.04 Located At Horizontal Angle = 180, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (180 - 0) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)