

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P938337

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938337
REPORT IS A COMBINATION OF REPORTS P933638 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

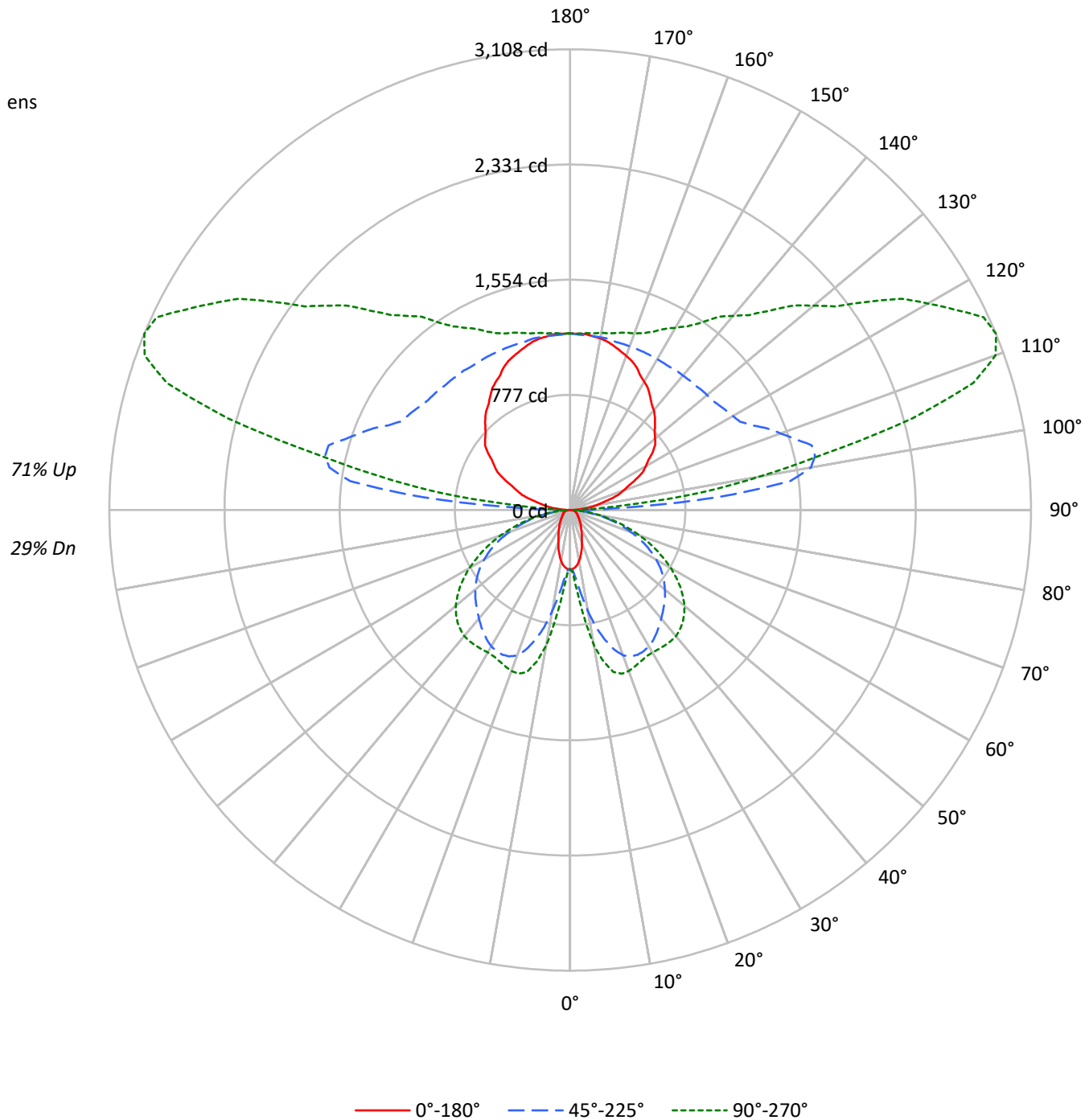
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10805.6 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 95.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P938337
CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-2700K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2465	2465	2465
5°	2407	2848	3313
10°	2183	4151	5493
15°	1854	5421	6633
20°	1509	6282	6760
25°	1258	6572	6623
30°	1061	6612	6610
35°	938	6500	6781
40°	816	6355	6958
45°	738	6248	6985
50°	677	6153	6869
55°	648	6013	6565
60°	663	5746	6084
65°	688	5342	5423
70°	732	4656	4582
75°	808	3792	3575
80°	876	2626	2409
85°	763	1392	1232

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6985 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	0.5
10°-20°	228.4	2.1
20°-30°	399.6	3.7
30°-40°	514.4	4.8
40°-50°	574.5	5.3
50°-60°	550.3	5.1
60°-70°	436.1	4.0
70°-80°	256.4	2.4
80°-90°	75.8	0.7
90°-100°	580.4	5.4
100°-110°	1525.8	14.1
110°-120°	1582.1	14.6
120°-130°	1269.1	11.7
130°-140°	995.8	9.2
140°-150°	764.3	7.1
150°-160°	550.4	5.1
160°-170°	336.8	3.1
170°-180°	113.8	1.1
0°-30°	679.6	6.3
0°-40°	1194.0	11.0
0°-60°	2318.8	21.5
0°-90°	3087.1	28.6
90°-120°	3688.4	34.1
90°-150°	6717.5	62.2
90°-180°	7719.0	71.4
0°-180°	10805.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	550	36
15°	291	537	904	1097	1131	81
25°	186	609	1078	1125	1126	86
35°	126	582	1015	1072	1115	78
45°	86	464	897	1028	1074	66
55°	62	295	761	884	908	56
65°	49	156	565	636	644	48
75°	36	96	310	341	342	38
85°	13	30	77	85	86	14
90°	8	22	61	30	30	7
95°	77	300	1000	515	351	85
105°	275	416	1687	2561	2389	291
115°	488	593	1351	2695	3076	482
125°	679	762	1229	2077	2450	603
135°	810	891	1191	1676	1901	626
145°	939	999	1176	1430	1542	588
155°	1061	1091	1176	1290	1328	488
165°	1145	1160	1176	1222	1237	323
175°	1191	1191	1184	1199	1199	113
180°	1191	1191	1191	1191	1191	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5
2.5°	398.5	398.5	401.0	402.3	404.9	406.1	408.7	411.3	418.9	420.2	422.8
5°	388.2	393.3	410.0	416.4	434.3	458.7	468.9	485.6	520.2	530.4	536.8
7.5°	372.8	384.4	425.4	435.6	480.4	544.5	571.4	607.3	662.4	689.3	711.1
10°	348.5	372.8	445.9	470.2	543.2	640.6	690.6	740.5	823.8	861.0	875.1
12.5°	321.6	361.3	467.6	500.9	606.0	748.2	808.4	863.5	958.3	1008.4	1016.1
15°	290.8	344.6	488.1	536.8	672.6	837.9	904.5	972.5	1060.9	1096.8	1105.8
17.5°	263.9	331.8	507.4	558.6	723.9	918.6	986.6	1043.0	1114.7	1139.1	1145.5
20°	230.6	311.3	520.2	586.8	777.7	977.6	1043.0	1086.5	1135.2	1150.6	1153.2
22.5°	206.3	289.5	527.9	597.0	813.6	1013.5	1068.6	1103.2	1136.5	1141.6	1142.9
25°	185.8	265.2	526.6	608.6	844.3	1035.3	1077.6	1103.2	1122.4	1125.0	1125.0
27.5°	166.6	238.3	521.4	611.1	867.4	1040.4	1073.7	1091.7	1100.6	1105.8	1105.8
30°	149.9	212.7	508.6	606.0	877.6	1035.3	1062.2	1071.2	1080.1	1087.8	1091.7
32.5°	137.1	188.3	489.4	595.8	878.9	1022.5	1041.7	1046.8	1059.6	1077.6	1084.0
35°	125.6	164.0	467.6	581.7	871.2	1002.0	1014.8	1019.9	1045.5	1072.4	1081.4
37.5°	114.0	146.1	439.4	557.3	859.7	977.6	986.6	995.6	1035.3	1067.3	1077.6
40°	102.5	130.7	406.1	530.4	841.7	948.1	955.8	969.9	1022.5	1059.6	1069.9
42.5°	93.5	117.9	370.3	502.2	818.7	914.8	926.3	946.8	1007.1	1046.8	1058.4
45°	85.8	105.1	331.8	463.8	789.2	880.2	896.8	925.0	989.2	1027.6	1037.9
47.5°	78.2	96.1	292.1	424.1	757.2	845.6	867.4	899.4	964.7	1002.0	1010.9
50°	71.7	87.1	252.4	381.8	722.6	808.4	834.1	867.4	934.0	968.6	980.2
52.5°	66.6	79.4	215.2	339.5	682.9	770.0	799.5	834.1	896.8	930.1	937.8
55°	61.5	73.0	183.2	294.7	641.9	729.0	761.0	794.3	855.8	884.0	889.1
57.5°	58.9	67.9	156.3	252.4	598.3	682.9	718.7	749.5	807.2	828.9	834.1
60°	55.1	64.1	135.8	216.5	550.9	639.3	670.1	700.8	749.5	767.4	771.3
62.5°	51.2	61.5	120.4	181.9	502.2	588.1	618.8	647.0	688.0	700.8	705.9
65°	48.7	58.9	108.9	156.3	452.3	534.3	565.0	589.3	622.7	635.5	638.0
67.5°	46.1	56.4	99.9	134.5	402.3	480.4	503.5	526.6	552.2	565.0	566.3
70°	42.3	53.8	92.2	119.2	351.0	418.9	438.2	462.5	483.0	489.4	493.3
72.5°	39.7	50.0	87.1	107.6	298.5	360.0	378.0	392.0	410.0	416.4	416.4
75°	35.9	44.8	82.0	96.1	244.7	294.7	310.0	324.1	338.2	340.8	337.0
77.5°	32.0	39.7	70.5	80.7	190.9	233.2	246.0	253.7	265.2	267.8	269.1
80°	26.9	34.6	55.1	62.8	138.4	171.7	180.6	187.1	197.3	197.3	199.9
82.5°	20.5	26.9	39.7	44.8	93.5	117.9	125.6	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.4	71.7	76.9	78.2	83.3	84.6	84.6
87.5°	6.4	9.0	16.7	17.9	29.5	37.2	37.2	39.7	39.7	38.4	37.2
90°	8.0	14.4	20.8	22.4	35.2	52.2	60.7	54.0	40.5	30.4	30.4
92.5°	31.9	86.3	140.7	154.3	216.9	300.3	342.0	299.7	215.2	151.9	145.8
95°	76.7	176.1	275.6	300.5	533.6	844.3	999.7	892.1	676.8	515.4	497.1
97.5°	132.6	220.4	308.1	330.0	718.7	1236.9	1495.9	1427.9	1291.9	1189.9	1155.0
100°	175.8	255.4	334.9	354.8	786.1	1361.1	1648.6	1653.5	1663.5	1670.9	1629.5
102.5°	212.6	286.8	361.0	379.6	817.0	1400.1	1691.7	1778.3	1951.6	2081.6	2046.1
105°	274.9	337.7	400.6	416.3	839.9	1404.5	1686.9	1881.1	2269.7	2561.1	2542.0
107.5°	338.8	397.4	456.0	470.6	844.0	1342.0	1591.0	1862.0	2403.9	2810.4	2815.0
110°	382.0	434.9	487.8	501.0	837.7	1286.6	1511.0	1814.0	2419.9	2874.3	2894.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	424.3	474.7	525.1	537.8	838.0	1238.2	1438.4	1748.4	2368.5	2833.6	2864.1
115°	488.2	534.8	581.3	592.9	845.7	1182.7	1351.2	1649.9	2247.3	2695.3	2737.7
117.5°	551.3	593.6	635.9	646.5	861.5	1148.0	1291.4	1560.9	2100.0	2504.3	2551.3
120°	588.2	628.0	667.8	677.7	874.2	1136.3	1267.4	1513.7	2006.3	2375.7	2421.3
122.5°	624.1	664.3	704.4	714.4	892.6	1130.2	1249.0	1470.8	1914.4	2247.0	2292.1
125°	679.2	715.8	752.4	761.5	917.3	1125.1	1229.0	1417.4	1794.2	2076.8	2118.2
127.5°	724.0	760.9	797.8	807.1	942.1	1122.2	1212.2	1374.0	1697.5	1940.2	1975.2
130°	748.0	787.8	827.6	837.5	960.3	1124.0	1205.9	1349.9	1637.9	1853.9	1886.2
132.5°	772.7	812.5	852.3	862.2	974.9	1125.1	1200.2	1329.1	1587.0	1780.3	1809.3
135°	809.5	845.7	882.0	891.0	990.9	1124.0	1190.7	1298.6	1514.5	1676.5	1701.4
137.5°	847.0	882.9	918.8	927.8	1014.9	1131.0	1189.0	1280.3	1462.9	1599.8	1620.2
140°	878.2	911.3	944.2	952.5	1029.5	1132.1	1183.5	1262.3	1420.0	1538.3	1557.3
142.5°	902.1	932.7	963.3	970.9	1041.8	1136.2	1183.5	1252.7	1391.2	1495.1	1511.5
145°	938.9	965.6	992.2	998.9	1057.8	1136.2	1175.5	1232.1	1345.4	1430.4	1442.8
147.5°	975.7	1001.6	1027.5	1034.0	1081.2	1144.0	1175.5	1220.0	1309.1	1376.0	1386.3
150°	999.7	1023.1	1046.5	1052.4	1093.4	1148.1	1175.5	1213.1	1288.4	1344.8	1353.2
152.5°	1024.4	1042.2	1060.0	1064.4	1101.4	1150.8	1175.5	1207.6	1271.9	1320.1	1326.4
155°	1061.2	1074.3	1087.5	1090.7	1119.0	1156.7	1175.5	1201.0	1252.2	1290.5	1294.7
157.5°	1088.3	1101.1	1114.0	1117.1	1136.6	1162.5	1175.5	1195.4	1235.2	1265.0	1267.9
160°	1106.8	1116.7	1126.6	1129.1	1144.5	1165.1	1175.5	1192.5	1226.6	1252.2	1253.9
162.5°	1125.1	1132.6	1140.0	1141.9	1153.1	1168.0	1175.5	1189.8	1218.6	1240.2	1241.8
165°	1145.1	1151.9	1158.5	1160.2	1165.3	1172.0	1175.5	1185.8	1206.4	1221.8	1223.5
167.5°	1163.5	1166.7	1169.9	1170.7	1174.9	1180.7	1183.5	1190.2	1203.7	1213.8	1214.5
170°	1175.5	1178.6	1181.9	1182.6	1182.9	1183.3	1183.5	1190.2	1203.7	1213.8	1213.8
172.5°	1181.9	1182.5	1183.3	1183.5	1183.5	1183.5	1183.5	1188.8	1199.5	1207.4	1206.8
175°	1190.7	1190.7	1190.7	1190.7	1188.3	1185.1	1183.5	1186.8	1193.6	1198.6	1198.6
177.5°	1190.7	1190.7	1190.7	1190.7	1188.8	1186.3	1185.0	1187.7	1193.0	1197.1	1196.4
180°	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.5	398.5
2.5°	425.4	422.8
5°	547.1	549.6
7.5°	736.7	735.4
10°	916.1	927.6
12.5°	1046.8	1049.4
15°	1126.3	1131.4
17.5°	1157.0	1158.3
20°	1158.3	1155.7
22.5°	1144.2	1141.6
25°	1127.5	1126.3
27.5°	1112.2	1113.4
30°	1105.8	1109.6
32.5°	1105.8	1112.2
35°	1108.3	1114.7
37.5°	1107.0	1114.7
40°	1101.9	1110.9
42.5°	1087.8	1094.2
45°	1066.0	1073.7
47.5°	1037.9	1043.0
50°	1002.0	1007.1
52.5°	957.1	958.3
55°	903.2	908.4
57.5°	845.6	846.9
60°	781.5	785.4
62.5°	713.6	713.6
65°	641.9	644.4
67.5°	567.6	574.0
70°	492.0	493.3
72.5°	417.7	417.7
75°	340.8	342.1
77.5°	267.8	267.8
80°	198.6	199.9
82.5°	137.1	139.6
85°	85.8	85.8
87.5°	39.7	35.9
90°	30.4	30.4
92.5°	121.6	97.5
95°	423.9	350.8
97.5°	1015.8	876.6
100°	1463.6	1297.8
102.5°	1904.0	1762.0
105°	2465.6	2389.3
107.5°	2833.5	2851.9
110°	2973.7	3053.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2986.3	3108.4
115°	2907.0	3076.5
117.5°	2739.2	2927.1
120°	2603.9	2786.4
122.5°	2472.1	2652.2
125°	2284.1	2450.0
127.5°	2115.1	2255.1
130°	2015.5	2144.7
132.5°	1925.0	2040.9
135°	1801.3	1901.0
137.5°	1701.9	1783.6
140°	1633.7	1710.0
142.5°	1577.2	1642.9
145°	1492.5	1542.2
147.5°	1427.5	1468.8
150°	1386.6	1420.0
152.5°	1351.6	1376.9
155°	1311.3	1328.1
157.5°	1279.7	1291.4
160°	1260.6	1267.4
162.5°	1248.1	1254.5
165°	1230.2	1236.9
167.5°	1217.4	1220.2
170°	1213.8	1213.8
172.5°	1204.3	1201.8
175°	1198.6	1198.6
177.5°	1193.5	1190.7
180°	1190.7	1190.7



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	1.75	2.46	2.86	3.58	5.12	14.91	15.63	16.03	16.74	18.29
	3H	2.44	3.08	3.56	4.20	5.77	16.73	17.38	17.86	18.50	20.06
	4H	2.73	3.34	3.87	4.46	6.03	17.37	17.98	18.50	19.10	20.67
	6H	2.97	3.54	4.12	4.66	6.24	17.79	18.35	18.93	19.47	21.05
	8H	3.04	3.57	4.18	4.71	6.28	17.90	18.44	19.05	19.58	21.15
	12H	3.05	3.56	4.20	4.69	6.29	17.96	18.47	19.11	19.60	21.20
4H	2H	8.93	9.54	10.08	10.67	12.23	15.17	15.78	16.31	16.90	18.47
	3H	10.49	11.00	11.64	12.15	13.73	17.19	17.70	18.34	18.85	20.43
	4H	10.58	11.05	11.73	12.18	13.78	17.95	18.42	19.10	19.56	21.16
	6H	10.58	10.98	11.74	12.14	13.73	18.48	18.88	19.63	20.04	21.63
	8H	10.55	10.93	11.71	12.08	13.69	18.63	19.01	19.79	20.16	21.77
	12H	10.50	10.84	11.67	12.01	13.62	18.72	19.06	19.89	20.22	21.83
8H	4H	12.01	12.38	13.16	13.53	15.14	18.00	18.38	19.16	19.53	21.13
	6H	12.24	12.55	13.42	13.75	15.35	18.62	18.93	19.79	20.12	21.73
	8H	12.26	12.53	13.44	13.70	15.32	18.83	19.10	20.01	20.28	21.90
	12H	12.22	12.46	13.40	13.63	15.28	18.97	19.21	20.15	20.38	22.03
12H	4H	12.14	12.48	13.31	13.65	15.26	17.94	18.29	19.12	19.45	21.06
	6H	12.50	12.77	13.68	13.94	15.56	18.60	18.87	19.78	20.04	21.67
	8H	12.56	12.80	13.75	13.97	15.62	18.82	19.06	20.01	20.23	21.88