

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: P938375

Luminaire Tested: SQ4-FB-150U-075D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938375
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

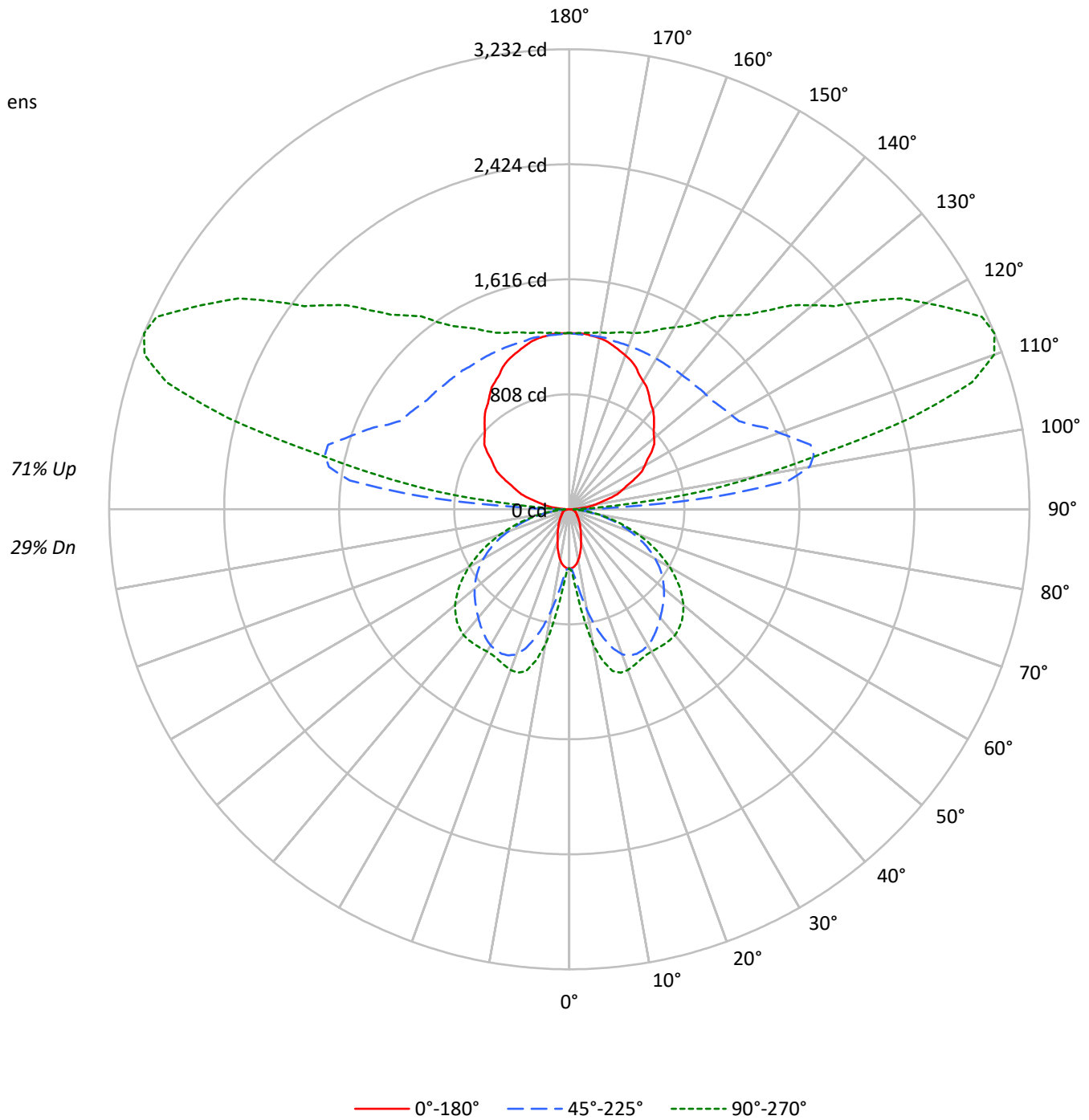
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11234.0 lumens
Efficiency: N/A
Efficacy: 117.8 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 (Ain): 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

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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	50	30	10
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°	2563	2563	2563
5°	2503	2961	3444
10°	2269	4315	5711
15°	1928	5637	6896
20°	1569	6531	7028
25°	1308	6832	6885
30°	1102	6874	6872
35°	974	6758	7050
40°	849	6607	7233
45°	768	6497	7262
50°	704	6396	7141
55°	673	6251	6825
60°	689	5974	6325
65°	715	5554	5638
70°	761	4840	4763
75°	839	3942	3717
80°	911	2731	2505
85°	793	1446	1281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7262 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	0.5
10°-20°	237.5	2.1
20°-30°	415.4	3.7
30°-40°	534.8	4.8
40°-50°	597.3	5.3
50°-60°	572.1	5.1
60°-70°	453.4	4.0
70°-80°	266.6	2.4
80°-90°	78.8	0.7
90°-100°	603.4	5.4
100°-110°	1586.4	14.1
110°-120°	1644.9	14.6
120°-130°	1319.4	11.7
130°-140°	1035.3	9.2
140°-150°	794.6	7.1
150°-160°	572.2	5.1
160°-170°	350.1	3.1
170°-180°	118.3	1.1
0°-30°	706.5	6.3
0°-40°	1241.3	11.0
0°-60°	2410.7	21.5
0°-90°	3209.5	28.6
90°-120°	3834.7	34.1
90°-150°	6983.9	62.2
90°-180°	8025.0	71.4
0°-180°	11234.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	404	433	488	551	571	37
15°	302	558	940	1140	1176	84
25°	193	633	1120	1170	1171	89
35°	130	605	1055	1115	1159	81
45°	89	482	932	1068	1116	69
55°	64	306	791	919	944	58
65°	51	162	587	661	670	50
75°	37	100	322	354	356	39
85°	13	31	80	88	89	14
90°	8	23	63	32	32	8
95°	80	312	1039	536	365	89
105°	286	433	1754	2663	2484	303
115°	508	616	1405	2802	3198	501
125°	706	792	1278	2159	2547	627
135°	842	926	1238	1743	1976	651
145°	976	1038	1222	1487	1603	612
155°	1103	1134	1222	1342	1381	507
165°	1190	1206	1222	1270	1286	336
175°	1238	1238	1230	1246	1246	118
180°	1238	1238	1238	1238	1238	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	414.3	414.3	416.9	418.2	420.9	422.2	424.9	427.6	435.6	436.9	439.6
5°	403.6	408.9	426.2	432.9	451.5	476.9	487.5	504.8	540.8	551.4	558.1
7.5°	387.6	399.6	442.2	452.9	499.5	566.1	594.1	631.4	688.6	716.6	739.3
10°	362.3	387.6	463.5	488.8	564.8	666.0	717.9	769.9	856.5	895.1	909.8
12.5°	334.3	375.6	486.2	520.8	630.0	777.9	840.5	897.8	996.3	1048.4	1056.4
15°	302.4	358.3	507.5	558.1	699.3	871.1	940.4	1011.1	1103.0	1140.3	1149.6
17.5°	274.4	345.0	527.5	580.8	752.6	955.0	1025.7	1084.3	1158.9	1184.2	1190.9
20°	239.8	323.7	540.8	610.1	808.5	1016.4	1084.3	1129.6	1180.2	1196.2	1198.9
22.5°	214.5	301.0	548.8	620.7	845.8	1053.7	1111.0	1146.9	1181.6	1186.9	1188.2
25°	193.1	275.7	547.5	632.7	877.8	1076.3	1120.3	1146.9	1166.9	1169.6	1169.6
27.5°	173.2	247.8	542.1	635.4	901.8	1081.7	1116.3	1135.0	1144.3	1149.6	1149.6
30°	155.8	221.1	528.8	630.0	912.4	1076.3	1104.3	1113.6	1123.0	1131.0	1135.0
32.5°	142.5	195.8	508.8	619.4	913.8	1063.0	1083.0	1088.3	1101.7	1120.3	1127.0
35°	130.5	170.5	486.2	604.7	905.8	1041.7	1055.0	1060.4	1087.0	1115.0	1124.3
37.5°	118.5	151.8	456.9	579.4	893.8	1016.4	1025.7	1035.1	1076.3	1109.6	1120.3
40°	106.6	135.9	422.2	551.4	875.1	985.7	993.7	1008.3	1063.0	1101.7	1112.3
42.5°	97.2	122.5	384.9	522.1	851.1	951.0	963.0	984.3	1047.0	1088.3	1100.3
45°	89.2	109.2	345.0	482.2	820.5	915.1	932.4	961.7	1028.4	1068.4	1079.0
47.5°	81.3	99.9	303.7	440.9	787.2	879.1	901.8	935.1	1003.0	1041.7	1051.0
50°	74.6	90.6	262.4	396.9	751.2	840.5	867.1	901.8	971.0	1007.0	1019.1
52.5°	69.3	82.6	223.8	353.0	710.0	800.5	831.2	867.1	932.4	967.0	975.0
55°	63.9	75.9	190.5	306.4	667.3	757.9	791.2	825.8	889.8	919.1	924.4
57.5°	61.3	70.6	162.5	262.4	622.0	710.0	747.3	779.2	839.2	861.8	867.1
60°	57.3	66.6	141.2	225.1	572.8	664.7	696.6	728.6	779.2	797.9	801.9
62.5°	53.3	63.9	125.2	189.1	522.1	611.4	643.4	672.7	715.3	728.6	733.9
65°	50.6	61.3	113.2	162.5	470.2	555.4	587.4	612.7	647.4	660.7	663.3
67.5°	48.0	58.6	103.9	139.9	418.2	499.5	523.5	547.5	574.1	587.4	588.7
70°	44.0	55.9	95.9	123.9	365.0	435.6	455.5	480.9	502.2	508.8	512.8
72.5°	41.3	51.9	90.6	111.9	310.4	374.3	392.9	407.6	426.2	432.9	432.9
75°	37.3	46.6	85.2	99.9	254.4	306.4	322.3	337.0	351.6	354.3	350.3
77.5°	33.3	41.3	73.3	83.9	198.5	242.4	255.7	263.7	275.7	278.4	279.7
80°	28.0	36.0	57.3	65.3	143.9	178.5	187.8	194.5	205.1	205.1	207.8
82.5°	21.3	28.0	41.3	46.6	97.2	122.5	130.5	134.5	141.2	141.2	141.2
85°	13.3	17.3	26.6	30.6	58.6	74.6	79.9	81.3	86.6	87.9	87.9
87.5°	6.7	9.3	17.3	18.6	30.6	38.6	38.6	41.3	41.3	40.0	38.6
90°	8.3	15.0	21.6	23.3	36.6	54.3	63.1	56.1	42.1	31.6	31.6
92.5°	33.2	89.7	146.3	160.4	225.5	312.2	355.6	311.6	223.8	157.9	151.6
95°	79.7	183.1	286.6	312.4	554.7	877.8	1039.3	927.4	703.7	535.8	516.8
97.5°	137.9	229.1	320.3	343.1	747.2	1285.9	1555.2	1484.6	1343.1	1237.1	1200.8
100°	182.8	265.5	348.2	368.9	817.2	1415.0	1713.9	1719.1	1729.5	1737.2	1694.1
102.5°	221.0	298.2	375.4	394.6	849.4	1455.6	1758.8	1848.8	2029.0	2164.1	2127.2
105°	285.8	351.1	416.5	432.8	873.2	1460.2	1753.8	1955.7	2359.7	2662.7	2642.8
107.5°	352.3	413.2	474.1	489.3	877.5	1395.2	1654.1	1935.8	2499.3	2921.9	2926.7
110°	397.1	452.2	507.1	520.9	871.0	1337.6	1571.0	1885.9	2515.9	2988.3	3009.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	441.2	493.6	545.9	559.1	871.2	1287.3	1495.4	1817.7	2462.4	2945.9	2977.7
115°	507.6	556.0	604.4	616.4	879.2	1229.6	1404.8	1715.3	2336.4	2802.2	2846.2
117.5°	573.2	617.2	661.1	672.1	895.6	1193.6	1342.6	1622.8	2183.2	2603.6	2652.5
120°	611.5	652.9	694.2	704.5	908.9	1181.4	1317.6	1573.7	2085.8	2469.9	2517.3
122.5°	648.9	690.6	732.3	742.7	928.0	1175.0	1298.5	1529.1	1990.3	2336.2	2382.9
125°	706.1	744.1	782.2	791.7	953.7	1169.8	1277.7	1473.6	1865.3	2159.2	2202.2
127.5°	752.7	791.0	829.5	839.1	979.5	1166.7	1260.2	1428.4	1764.8	2017.1	2053.5
130°	777.6	819.0	860.4	870.7	998.4	1168.6	1253.7	1403.4	1702.8	1927.4	1961.0
132.5°	803.4	844.8	886.1	896.4	1013.6	1169.8	1247.8	1381.8	1649.9	1850.9	1881.1
135°	841.6	879.2	916.9	926.4	1030.2	1168.6	1237.9	1350.1	1574.6	1743.0	1768.9
137.5°	880.6	917.9	955.2	964.5	1055.1	1175.8	1236.2	1331.1	1520.9	1663.2	1684.4
140°	913.0	947.4	981.7	990.3	1070.3	1177.0	1230.4	1312.4	1476.3	1599.3	1619.1
142.5°	937.9	969.7	1001.5	1009.4	1083.1	1181.3	1230.4	1302.4	1446.4	1554.4	1571.4
145°	976.2	1003.9	1031.6	1038.5	1099.7	1181.3	1222.1	1280.9	1398.8	1487.1	1500.0
147.5°	1014.4	1041.4	1068.3	1075.0	1124.0	1189.4	1222.1	1268.4	1361.0	1430.6	1441.3
150°	1039.3	1063.6	1088.0	1094.1	1136.7	1193.6	1222.1	1261.2	1339.5	1398.2	1406.9
152.5°	1065.1	1083.5	1102.0	1106.6	1145.1	1196.4	1222.1	1255.5	1322.3	1372.4	1379.0
155°	1103.3	1116.9	1130.6	1134.0	1163.4	1202.5	1222.1	1248.6	1301.8	1341.7	1346.0
157.5°	1131.5	1144.8	1158.1	1161.4	1181.7	1208.6	1222.1	1242.8	1284.1	1315.1	1318.1
160°	1150.7	1161.0	1171.3	1173.8	1189.9	1211.3	1222.1	1239.8	1275.3	1301.8	1303.6
162.5°	1169.8	1177.5	1185.2	1187.2	1198.8	1214.3	1222.1	1237.0	1266.9	1289.4	1291.1
165°	1190.5	1197.6	1204.5	1206.3	1211.5	1218.5	1222.1	1232.8	1254.2	1270.3	1272.1
167.5°	1209.6	1212.9	1216.3	1217.1	1221.5	1227.5	1230.4	1237.4	1251.5	1261.9	1262.6
170°	1222.1	1225.4	1228.7	1229.5	1229.8	1230.2	1230.4	1237.4	1251.5	1261.9	1261.9
172.5°	1228.7	1229.4	1230.2	1230.4	1230.4	1230.4	1230.4	1235.9	1247.0	1255.3	1254.7
175°	1237.9	1237.9	1237.9	1237.9	1235.4	1232.1	1230.4	1233.9	1240.9	1246.1	1246.1
177.5°	1237.9	1237.9	1237.9	1237.9	1235.9	1233.3	1232.0	1234.8	1240.4	1244.5	1243.8
180°	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9	1237.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	414.3	414.3
2.5°	442.2	439.6
5°	568.8	571.4
7.5°	765.9	764.6
10°	952.4	964.4
12.5°	1088.3	1091.0
15°	1170.9	1176.2
17.5°	1202.9	1204.2
20°	1204.2	1201.6
22.5°	1189.6	1186.9
25°	1172.2	1170.9
27.5°	1156.3	1157.6
30°	1149.6	1153.6
32.5°	1149.6	1156.3
35°	1152.3	1158.9
37.5°	1150.9	1158.9
40°	1145.6	1154.9
42.5°	1131.0	1137.6
45°	1108.3	1116.3
47.5°	1079.0	1084.3
50°	1041.7	1047.0
52.5°	995.0	996.3
55°	939.1	944.4
57.5°	879.1	880.5
60°	812.5	816.5
62.5°	741.9	741.9
65°	667.3	670.0
67.5°	590.1	596.7
70°	511.5	512.8
72.5°	434.2	434.2
75°	354.3	355.6
77.5°	278.4	278.4
80°	206.5	207.8
82.5°	142.5	145.2
85°	89.2	89.2
87.5°	41.3	37.3
90°	31.6	31.6
92.5°	126.5	101.3
95°	440.7	364.7
97.5°	1056.1	911.4
100°	1521.7	1349.2
102.5°	1979.5	1831.9
105°	2563.4	2484.0
107.5°	2945.9	2965.0
110°	3091.7	3174.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3104.7	3231.7
115°	3022.3	3198.5
117.5°	2847.8	3043.2
120°	2707.2	2896.9
122.5°	2570.1	2757.3
125°	2374.7	2547.1
127.5°	2199.0	2344.5
130°	2095.4	2229.8
132.5°	2001.4	2121.8
135°	1872.7	1976.4
137.5°	1769.4	1854.3
140°	1698.5	1777.9
142.5°	1639.8	1708.1
145°	1551.7	1603.4
147.5°	1484.1	1527.0
150°	1441.6	1476.3
152.5°	1405.2	1431.5
155°	1363.3	1380.8
157.5°	1330.4	1342.6
160°	1310.6	1317.6
162.5°	1297.6	1304.3
165°	1279.0	1286.0
167.5°	1265.7	1268.6
170°	1261.9	1261.9
172.5°	1252.1	1249.5
175°	1246.1	1246.1
177.5°	1240.8	1237.9
180°	1237.9	1237.9



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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	1.88	2.60	3.00	3.71	5.26	15.05	15.76	16.16	16.88	18.42
	3H	2.57	3.22	3.70	4.34	5.90	16.87	17.51	17.99	18.63	20.19
	4H	2.87	3.48	4.00	4.60	6.17	17.50	18.11	18.64	19.24	20.80
	6H	3.11	3.67	4.25	4.80	6.38	17.92	18.48	19.06	19.61	21.19
	8H	3.17	3.71	4.32	4.85	6.42	18.04	18.57	19.18	19.71	21.28
	12H	3.18	3.69	4.34	4.83	6.42	18.10	18.60	19.25	19.74	21.33
4H	2H	9.07	9.68	10.21	10.80	12.37	15.30	15.91	16.44	17.04	18.60
	3H	10.62	11.13	11.77	12.28	13.86	17.33	17.84	18.48	18.99	20.57
	4H	10.71	11.18	11.86	12.32	13.92	18.09	18.56	19.24	19.69	21.29
	6H	10.71	11.12	11.87	12.28	13.87	18.61	19.02	19.77	20.18	21.76
	8H	10.69	11.06	11.84	12.22	13.82	18.77	19.14	19.92	20.30	21.90
	12H	10.64	10.98	11.81	12.14	13.75	18.85	19.19	20.02	20.36	21.97
8H	4H	12.14	12.52	13.30	13.67	15.28	18.13	18.51	19.29	19.66	21.27
	6H	12.38	12.69	13.55	13.88	15.48	18.75	19.06	19.93	20.26	21.86
	8H	12.39	12.66	13.57	13.84	15.46	18.97	19.24	20.15	20.41	22.03
	12H	12.35	12.59	13.54	13.76	15.42	19.10	19.34	20.29	20.51	22.17
12H	4H	12.28	12.62	13.45	13.78	15.39	18.08	18.42	19.25	19.58	21.20
	6H	12.63	12.90	13.81	14.08	15.70	18.73	19.01	19.92	20.18	21.80
	8H	12.69	12.93	13.88	14.10	15.76	18.95	19.19	20.14	20.36	22.02