

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: P937312

Luminaire Tested: SQ4-FB-075U-125D-830-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937312
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

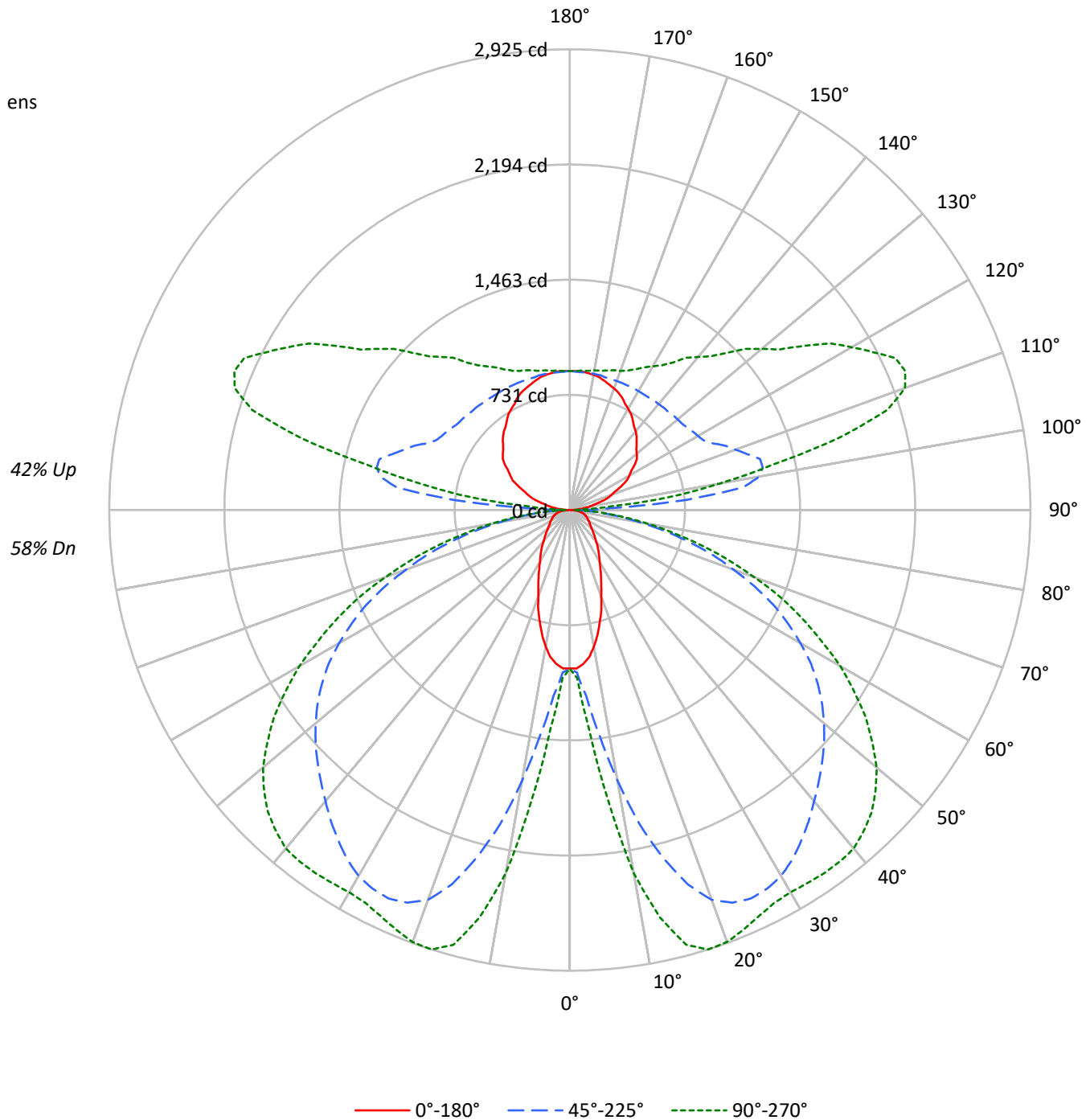
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13513.1 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124
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	0
RCR																					
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4669	4669	4669
5°	4561	5396	6276
10°	4137	7866	10404
15°	3516	10277	12563
20°	2863	11909	12803
25°	2388	12463	12543
30°	2014	12541	12519
35°	1780	12333	12843
40°	1552	12062	13178
45°	1405	11864	13229
50°	1289	11686	13010
55°	1235	11424	12434
60°	1263	10922	11523
65°	1314	10160	10272
70°	1401	8860	8678
75°	1552	7225	6772
80°	1697	5010	4563
85°	1504	2659	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13229 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.0
10°-20°	576.9	4.3
20°-30°	1009.1	7.5
30°-40°	1299.0	9.6
40°-50°	1451.0	10.7
50°-60°	1389.7	10.3
60°-70°	1101.3	8.2
70°-80°	647.6	4.8
80°-90°	183.3	1.4
90°-100°	430.5	3.2
100°-110°	1131.8	8.4
110°-120°	1173.5	8.7
120°-130°	941.3	7.0
130°-140°	738.6	5.5
140°-150°	566.9	4.2
150°-160°	408.3	3.0
160°-170°	249.8	1.8
170°-180°	84.4	0.6
0°-30°	1716.2	12.7
0°-40°	3015.2	22.3
0°-60°	5855.9	43.3
0°-90°	7788.1	57.6
90°-120°	2735.8	20.2
90°-150°	4982.6	36.9
90°-180°	5725.0	42.4
0°-180°	13513.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	980	1052	1184	1340	1388	90
15°	734	1356	2284	2770	2857	204
25°	469	1537	2721	2841	2844	216
35°	317	1469	2563	2708	2815	198
45°	217	1171	2265	2595	2712	168
55°	155	744	1922	2233	2294	142
65°	123	395	1427	1605	1628	122
75°	91	243	783	861	864	95
85°	32	74	194	214	217	34
90°	6	17	45	23	23	7
95°	57	223	742	382	260	63
105°	204	309	1251	1900	1772	216
115°	362	440	1002	1999	2282	358
125°	504	565	912	1540	1817	447
135°	600	661	883	1244	1410	465
145°	696	741	872	1061	1144	436
155°	787	809	872	957	985	362
165°	849	861	872	906	918	240
175°	883	883	878	889	889	84
180°	883	883	883	883	883	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3	1006.3
2.5°	1006.3	1006.3	1012.8	1016.0	1022.4	1025.7	1032.2	1038.7	1058.1	1061.4	1067.8
5°	980.4	993.4	1035.4	1051.6	1096.9	1158.4	1184.3	1226.4	1313.6	1339.5	1355.7
7.5°	941.6	970.7	1074.3	1100.2	1213.4	1375.2	1443.1	1533.7	1672.8	1740.8	1795.8
10°	880.1	941.6	1126.0	1187.4	1372.0	1617.8	1744.0	1870.2	2080.5	2174.4	2210.0
12.5°	812.1	912.5	1181.0	1265.2	1530.5	1889.6	2041.7	2180.8	2420.3	2546.5	2565.9
15°	734.5	870.4	1232.8	1355.7	1698.7	2116.1	2284.4	2455.9	2679.2	2769.7	2792.4
17.5°	666.5	838.0	1281.3	1410.8	1828.2	2320.0	2491.4	2633.9	2815.0	2876.5	2892.7
20°	582.4	786.3	1313.6	1481.9	1964.1	2468.9	2633.9	2743.8	2866.9	2905.7	2912.1
22.5°	520.9	731.2	1333.1	1507.8	2054.6	2559.4	2698.6	2785.9	2870.0	2883.0	2886.3
25°	469.2	669.8	1329.9	1537.0	2132.4	2614.5	2721.3	2785.9	2834.4	2840.9	2840.9
27.5°	420.6	601.8	1316.9	1543.5	2190.6	2627.4	2711.5	2756.8	2779.5	2792.4	2792.4
30°	378.6	537.1	1284.6	1530.5	2216.5	2614.5	2682.3	2705.0	2727.7	2747.1	2756.8
32.5°	346.3	475.6	1236.0	1504.6	2219.6	2582.1	2630.6	2643.5	2675.9	2721.3	2737.4
35°	317.1	414.1	1181.0	1469.0	2200.2	2530.3	2562.7	2575.6	2640.3	2708.3	2730.9
37.5°	287.9	368.8	1109.8	1407.5	2171.2	2468.9	2491.4	2514.1	2614.5	2695.3	2721.3
40°	258.9	330.0	1025.7	1339.5	2125.9	2394.4	2413.8	2449.4	2582.1	2675.9	2701.8
42.5°	236.2	297.7	935.2	1268.4	2067.6	2310.3	2339.4	2391.1	2543.2	2643.5	2672.7
45°	216.8	265.3	838.0	1171.3	1993.2	2222.9	2265.0	2336.2	2497.9	2595.1	2620.9
47.5°	197.4	242.6	737.7	1071.0	1912.3	2135.5	2190.6	2271.5	2436.5	2530.3	2553.0
50°	181.2	220.1	637.5	964.2	1824.9	2041.7	2106.5	2190.6	2358.8	2446.2	2475.3
52.5°	168.3	200.6	543.6	857.4	1724.6	1944.6	2019.1	2106.5	2265.0	2349.1	2368.5
55°	155.4	184.4	462.7	744.2	1621.1	1841.1	1922.0	2006.2	2161.4	2232.6	2245.5
57.5°	148.8	171.5	394.7	637.5	1511.1	1724.6	1815.3	1892.9	2038.5	2093.4	2106.5
60°	139.1	161.8	343.0	546.8	1391.4	1614.6	1692.2	1769.9	1892.9	1938.2	1947.8
62.5°	129.4	155.4	304.2	459.5	1268.4	1485.1	1562.9	1634.0	1737.5	1769.9	1782.8
65°	122.9	148.8	275.0	394.7	1142.2	1349.3	1426.9	1488.4	1572.5	1604.9	1611.3
67.5°	116.4	142.3	252.4	339.8	1016.0	1213.4	1271.6	1329.9	1394.6	1426.9	1430.2
70°	106.8	135.9	233.0	300.9	886.6	1058.1	1106.6	1168.0	1219.9	1236.0	1245.8
72.5°	100.3	126.2	220.1	271.8	753.9	909.3	954.6	990.1	1035.4	1051.6	1051.6
75°	90.6	113.3	207.1	242.6	618.1	744.2	783.1	818.6	854.2	860.7	851.0
77.5°	80.9	100.3	178.0	203.8	482.1	588.9	621.2	640.7	669.8	676.3	679.5
80°	68.0	87.4	139.1	158.5	349.4	433.5	456.2	472.5	498.3	498.3	504.8
82.5°	51.8	68.0	100.3	113.3	236.2	297.7	317.1	326.8	343.0	343.0	343.0
85°	32.3	42.1	64.7	74.4	142.3	181.2	194.2	197.4	210.3	213.6	213.6
87.5°	16.2	22.7	42.1	45.3	74.4	93.9	93.9	100.3	100.3	97.0	93.9
90°	5.9	10.7	15.5	16.6	26.1	38.7	45.0	40.1	30.0	22.6	22.6
92.5°	23.7	64.1	104.4	114.4	160.9	222.7	253.7	222.4	159.7	112.6	108.1
95°	56.9	130.7	204.4	222.8	395.7	626.2	741.5	661.6	502.0	382.3	368.7
97.5°	98.4	163.5	228.6	244.8	533.1	917.4	1109.5	1059.1	958.2	882.6	856.8
100°	130.4	189.4	248.5	263.2	583.1	1009.5	1222.7	1226.5	1233.8	1239.4	1208.6
102.5°	157.6	212.7	267.8	281.5	605.9	1038.5	1254.8	1319.0	1447.6	1544.0	1517.6
105°	203.9	250.6	297.1	308.8	622.9	1041.8	1251.2	1395.3	1683.4	1899.6	1885.4
107.5°	251.3	294.8	338.2	349.1	626.1	995.4	1180.1	1381.0	1783.0	2084.6	2088.0
110°	283.4	322.6	361.8	371.6	621.3	954.3	1120.8	1345.5	1794.9	2132.0	2146.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	314.7	352.1	389.5	398.8	621.5	918.4	1066.9	1296.9	1756.8	2101.8	2124.4
115°	362.1	396.6	431.2	439.8	627.2	877.2	1002.3	1223.8	1666.9	1999.2	2030.6
117.5°	409.0	440.3	471.7	479.5	639.0	851.5	957.8	1157.7	1557.6	1857.5	1892.3
120°	436.2	465.7	495.2	502.6	648.4	842.8	940.0	1122.7	1488.1	1762.1	1795.9
122.5°	462.9	492.7	522.5	529.9	662.0	838.2	926.4	1090.9	1419.9	1666.7	1700.1
125°	503.8	531.0	558.0	564.8	680.4	834.5	911.5	1051.3	1330.8	1540.4	1571.2
127.5°	537.0	564.4	591.8	598.6	698.8	832.4	899.1	1019.1	1259.1	1439.1	1465.0
130°	554.8	584.2	613.8	621.1	712.2	833.7	894.4	1001.2	1214.9	1375.1	1399.1
132.5°	573.1	602.7	632.2	639.6	723.1	834.5	890.2	985.8	1177.1	1320.5	1342.0
135°	600.4	627.2	654.2	660.9	735.0	833.7	883.2	963.3	1123.4	1243.5	1262.0
137.5°	628.3	654.9	681.4	688.1	752.8	838.9	881.9	949.6	1085.1	1186.6	1201.7
140°	651.4	675.9	700.4	706.5	763.6	839.8	877.8	936.3	1053.2	1141.0	1155.1
142.5°	669.2	691.9	714.5	720.2	772.7	842.8	877.8	929.1	1031.9	1109.0	1121.1
145°	696.4	716.2	735.9	740.9	784.6	842.8	871.9	913.9	998.0	1061.0	1070.1
147.5°	723.7	742.9	762.2	767.0	802.0	848.5	871.9	904.9	971.0	1020.6	1028.3
150°	741.5	758.9	776.3	780.6	811.0	851.6	871.9	899.8	955.6	997.5	1003.7
152.5°	759.8	773.0	786.2	789.5	816.9	853.5	871.9	895.7	943.4	979.1	983.8
155°	787.1	796.8	806.6	809.1	830.0	857.9	871.9	890.8	928.8	957.2	960.3
157.5°	807.2	816.7	826.2	828.6	843.0	862.2	871.9	886.6	916.1	938.2	940.4
160°	820.9	828.3	835.6	837.5	848.9	864.2	871.9	884.5	909.8	928.8	930.0
162.5°	834.5	840.0	845.6	847.0	855.3	866.3	871.9	882.6	903.9	919.9	921.0
165°	849.3	854.3	859.3	860.6	864.3	869.4	871.9	879.5	894.8	906.3	907.5
167.5°	863.0	865.4	867.8	868.3	871.5	875.7	877.8	882.8	892.8	900.4	900.8
170°	871.9	874.3	876.7	877.2	877.4	877.7	877.8	882.8	892.8	900.4	900.4
172.5°	876.7	877.1	877.7	877.8	877.8	877.8	877.8	881.7	889.7	895.6	895.1
175°	883.2	883.2	883.2	883.2	881.3	878.9	877.8	880.3	885.4	889.1	889.1
177.5°	883.2	883.2	883.2	883.2	881.7	879.9	878.9	881.0	884.9	887.8	887.4
180°	883.2	883.2	883.2	883.2	883.2	883.2	883.2	883.2	883.2	883.2	883.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1006.3	1006.3
2.5°	1074.3	1067.8
5°	1381.6	1388.1
7.5°	1860.5	1857.3
10°	2313.5	2342.7
12.5°	2643.5	2650.0
15°	2844.2	2857.1
17.5°	2921.8	2925.1
20°	2925.1	2918.6
22.5°	2889.5	2883.0
25°	2847.4	2844.2
27.5°	2808.5	2811.8
30°	2792.4	2802.1
32.5°	2792.4	2808.5
35°	2798.9	2815.0
37.5°	2795.6	2815.0
40°	2782.7	2805.4
42.5°	2747.1	2763.3
45°	2692.1	2711.5
47.5°	2620.9	2633.9
50°	2530.3	2543.2
52.5°	2417.1	2420.3
55°	2281.1	2294.1
57.5°	2135.5	2138.8
60°	1973.8	1983.5
62.5°	1802.3	1802.3
65°	1621.1	1627.6
67.5°	1433.4	1449.6
70°	1242.5	1245.8
72.5°	1054.9	1054.9
75°	860.7	863.9
77.5°	676.3	676.3
80°	501.5	504.8
82.5°	346.3	352.7
85°	216.8	216.8
87.5°	100.3	90.6
90°	22.6	22.6
92.5°	90.2	72.3
95°	314.5	260.2
97.5°	753.4	650.2
100°	1085.6	962.6
102.5°	1412.3	1306.9
105°	1828.7	1772.1
107.5°	2101.7	2115.3
110°	2205.8	2264.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2215.0	2305.6
115°	2156.3	2281.9
117.5°	2031.7	2171.1
120°	1931.4	2066.8
122.5°	1833.6	1967.2
125°	1694.2	1817.3
127.5°	1568.8	1672.6
130°	1494.9	1590.8
132.5°	1427.9	1513.7
135°	1336.0	1410.0
137.5°	1262.3	1322.9
140°	1211.8	1268.4
142.5°	1169.9	1218.6
145°	1107.0	1143.9
147.5°	1058.8	1089.4
150°	1028.5	1053.2
152.5°	1002.5	1021.2
155°	972.7	985.1
157.5°	949.1	957.8
160°	935.1	940.0
162.5°	925.8	930.6
165°	912.5	917.5
167.5°	902.9	905.0
170°	900.4	900.4
172.5°	893.3	891.5
175°	889.1	889.1
177.5°	885.3	883.2
180°	883.2	883.2



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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	7.03	8.01	7.91	8.91	10.07	20.20	21.18	21.08	22.09	23.25
	3H	7.74	8.62	8.63	9.54	10.72	22.05	22.94	22.94	23.85	25.03
	4H	8.04	8.88	8.95	9.80	10.99	22.70	23.54	23.61	24.46	25.65
	6H	8.30	9.07	9.22	10.00	11.20	23.14	23.91	24.06	24.84	26.04
	8H	8.37	9.11	9.30	10.05	11.25	23.26	24.00	24.19	24.95	26.15
	12H	8.39	9.09	9.33	10.03	11.26	23.34	24.04	24.27	24.98	26.21
4H	2H	14.26	15.09	15.17	16.01	17.20	20.49	21.33	21.41	22.25	23.44
	3H	15.83	16.53	16.76	17.49	18.69	22.55	23.25	23.47	24.20	25.41
	4H	15.93	16.57	16.87	17.52	18.75	23.32	23.96	24.26	24.91	26.14
	6H	15.95	16.51	16.90	17.48	18.71	23.87	24.42	24.82	25.39	26.62
	8H	15.93	16.45	16.88	17.42	18.66	24.03	24.55	24.98	25.52	26.76
	12H	15.89	16.36	16.87	17.35	18.59	24.13	24.60	25.10	25.58	26.83
8H	4H	17.39	17.91	18.34	18.87	20.12	23.39	23.91	24.34	24.88	26.12
	6H	17.64	18.07	18.61	19.07	20.32	24.03	24.46	25.00	25.46	26.71
	8H	17.66	18.04	18.64	19.03	20.29	24.25	24.63	25.24	25.62	26.88
	12H	17.63	17.97	18.62	18.96	20.26	24.40	24.73	25.39	25.72	27.03
12H	4H	17.54	18.01	18.51	18.99	20.24	23.35	23.82	24.32	24.80	26.05
	6H	17.90	18.28	18.88	19.27	20.53	24.01	24.39	25.00	25.39	26.65
	8H	17.97	18.31	18.96	19.30	20.60	24.25	24.58	25.24	25.57	26.88