

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: P937345

Luminaire Tested: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

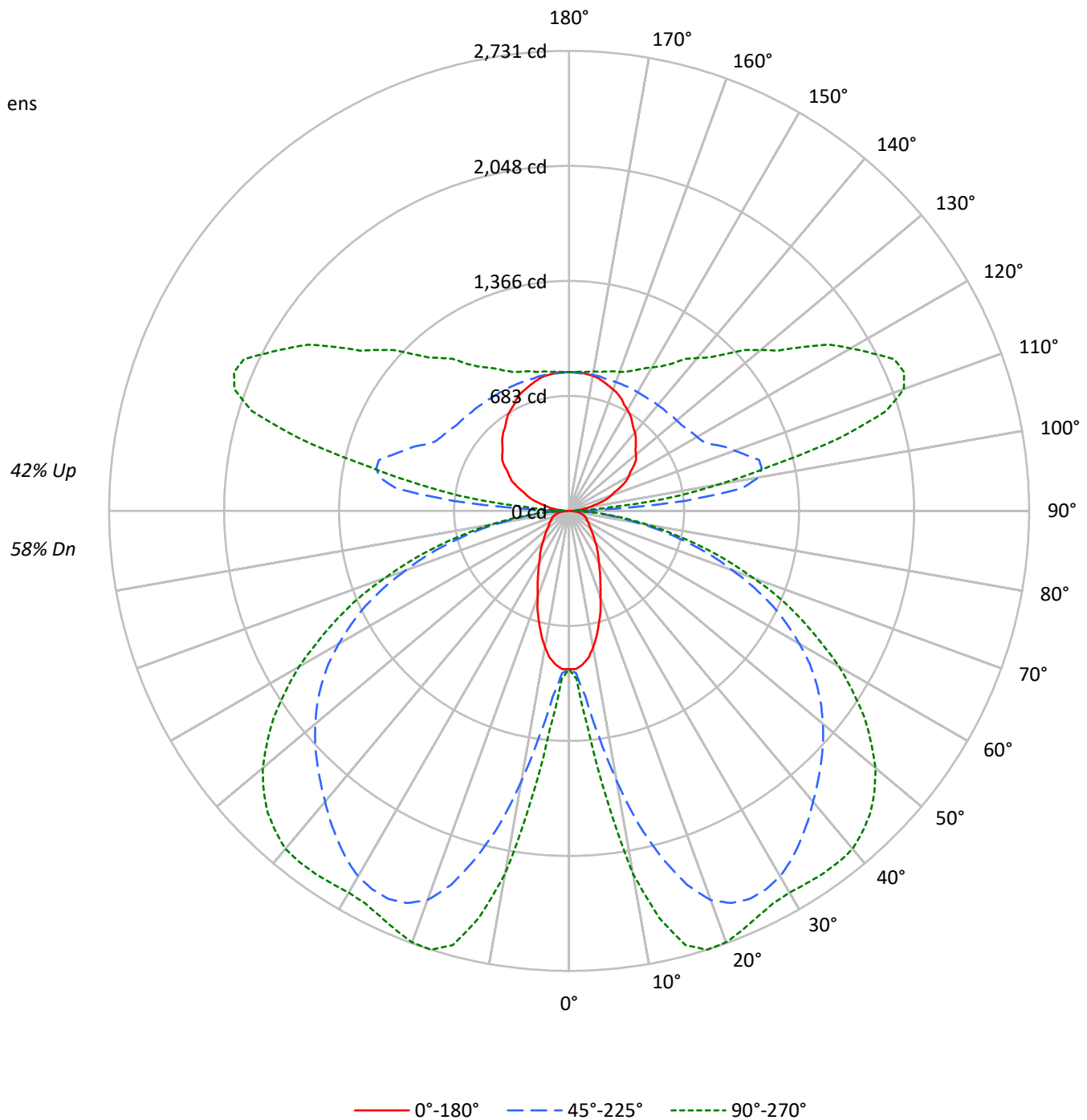
Test Method: LM-79-2019  
Report Number: P937345  
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-92765-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12617.2 lumens  
Efficiency: N/A  
Efficacy: 101.8 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 (A<sub>in</sub>): 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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58		
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47		
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38		
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32		
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27		
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23		
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19		
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17		
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15		
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13		
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4359	4359	4359
5°	4259	5039	5860
10°	3863	7344	9715
15°	3283	9595	11730
20°	2673	11120	11954
25°	2230	11636	11712
30°	1880	11709	11690
35°	1663	11515	11992
40°	1449	11263	12304
45°	1312	11077	12352
50°	1203	10911	12148
55°	1153	10667	11609
60°	1180	10198	10759
65°	1227	9486	9591
70°	1308	8273	8103
75°	1449	6745	6323
80°	1584	4678	4261
85°	1407	2482	2180

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12352 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.5	1.0
10°-20°	538.7	4.3
20°-30°	942.2	7.5
30°-40°	1212.9	9.6
40°-50°	1354.8	10.7
50°-60°	1297.6	10.3
60°-70°	1028.3	8.2
70°-80°	604.7	4.8
80°-90°	171.1	1.4
90°-100°	402.0	3.2
100°-110°	1056.7	8.4
110°-120°	1095.7	8.7
120°-130°	878.9	7.0
130°-140°	689.6	5.5
140°-150°	529.3	4.2
150°-160°	381.2	3.0
160°-170°	233.2	1.8
170°-180°	78.8	0.6
0°-30°	1602.4	12.7
0°-40°	2815.3	22.3
0°-60°	5467.6	43.3
0°-90°	7271.8	57.6
90°-120°	2554.4	20.2
90°-150°	4652.2	36.9
90°-180°	5345.0	42.4
0°-180°	12617.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	940	940	940	940	940	
5°	915	982	1106	1251	1296	84
15°	686	1266	2133	2586	2668	191
25°	438	1435	2541	2653	2656	202
35°	296	1372	2393	2529	2628	185
45°	202	1094	2115	2423	2532	157
55°	145	695	1795	2085	2142	132
65°	115	369	1332	1498	1520	114
75°	85	226	731	804	807	89
85°	30	69	181	199	202	32
90°	6	16	42	21	21	7
95°	53	208	692	357	243	59
105°	190	288	1168	1774	1655	202
115°	338	411	936	1867	2131	334
125°	470	527	851	1438	1697	418
135°	561	617	825	1161	1316	434
145°	650	692	814	991	1068	407
155°	735	755	814	894	920	338
165°	793	804	814	846	857	224
175°	825	825	820	830	830	78
180°	825	825	825	825	825	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	939.6	939.6	939.6	939.6	939.6	939.6	939.6	939.6	939.6	939.6	939.6
2.5°	939.6	939.6	945.6	948.7	954.7	957.7	963.8	969.8	988.0	991.0	997.0
5°	915.4	927.5	966.8	981.9	1024.2	1081.6	1105.8	1145.1	1226.5	1250.7	1265.8
7.5°	879.1	906.4	1003.0	1027.2	1132.9	1284.0	1347.4	1432.0	1561.9	1625.4	1676.8
10°	821.7	879.1	1051.3	1108.7	1281.0	1510.6	1628.4	1746.2	1942.6	2030.3	2063.5
12.5°	758.3	852.0	1102.7	1181.3	1429.0	1764.4	1906.4	2036.2	2259.8	2377.7	2395.8
15°	685.8	812.7	1151.0	1265.8	1586.1	1975.8	2132.9	2293.1	2501.6	2586.1	2607.3
17.5°	622.3	782.5	1196.4	1317.2	1707.0	2166.2	2326.3	2459.3	2628.4	2685.8	2700.9
20°	543.8	734.2	1226.5	1383.7	1833.9	2305.2	2459.3	2561.9	2676.8	2713.0	2719.0
22.5°	486.4	682.8	1244.8	1407.8	1918.4	2389.7	2519.7	2601.2	2679.7	2691.9	2694.9
25°	438.1	625.4	1241.7	1435.1	1991.0	2441.1	2540.8	2601.2	2646.5	2652.6	2652.6
27.5°	392.8	561.9	1229.6	1441.1	2045.3	2453.2	2531.7	2574.0	2595.2	2607.3	2607.3
30°	353.5	501.5	1199.4	1429.0	2069.5	2441.1	2504.5	2525.7	2546.8	2564.9	2574.0
32.5°	323.3	444.1	1154.1	1404.8	2072.5	2410.9	2456.2	2468.3	2498.5	2540.8	2555.9
35°	296.1	386.7	1102.7	1371.6	2054.4	2362.6	2392.8	2404.8	2465.2	2528.7	2549.9
37.5°	268.9	344.4	1036.2	1314.2	2027.2	2305.2	2326.3	2347.4	2441.1	2516.7	2540.8
40°	241.7	308.1	957.7	1250.7	1984.9	2235.7	2253.8	2287.0	2410.9	2498.5	2522.6
42.5°	220.6	278.0	873.2	1184.3	1930.6	2157.1	2184.3	2232.6	2374.6	2468.3	2495.5
45°	202.4	247.7	782.5	1093.6	1861.0	2075.5	2114.8	2181.3	2332.3	2423.0	2447.1
47.5°	184.3	226.5	688.8	1000.0	1785.5	1993.9	2045.3	2120.9	2274.9	2362.6	2383.7
50°	169.2	205.5	595.2	900.3	1703.9	1906.4	1966.8	2045.3	2202.5	2284.0	2311.2
52.5°	157.1	187.3	507.5	800.6	1610.3	1815.7	1885.2	1966.8	2114.8	2193.3	2211.5
55°	145.1	172.2	432.0	694.9	1513.6	1719.0	1794.6	1873.2	2018.1	2084.6	2096.7
57.5°	139.0	160.1	368.6	595.2	1410.9	1610.3	1694.9	1767.4	1903.3	1954.7	1966.8
60°	129.9	151.0	320.3	510.6	1299.1	1507.5	1580.0	1652.6	1767.4	1809.7	1818.7
62.5°	120.9	145.1	284.0	429.0	1184.3	1386.7	1459.3	1525.7	1622.3	1652.6	1664.6
65°	114.8	139.0	256.8	368.6	1066.5	1259.8	1332.3	1389.7	1468.3	1498.5	1504.5
67.5°	108.7	132.9	235.7	317.2	948.7	1132.9	1187.3	1241.7	1302.2	1332.3	1335.4
70°	99.7	126.9	217.5	281.0	827.8	988.0	1033.2	1090.6	1139.0	1154.1	1163.2
72.5°	93.6	117.8	205.5	253.8	703.9	849.0	891.3	924.5	966.8	981.9	981.9
75°	84.6	105.8	193.3	226.5	577.1	694.9	731.1	764.4	797.6	803.6	794.6
77.5°	75.5	93.6	166.2	190.3	450.1	549.9	580.0	598.2	625.4	631.4	634.5
80°	63.5	81.6	129.9	148.0	326.3	404.8	426.0	441.1	465.2	465.2	471.3
82.5°	48.4	63.5	93.6	105.8	220.6	278.0	296.1	305.1	320.3	320.3	320.3
85°	30.2	39.3	60.4	69.4	132.9	169.2	181.3	184.3	196.4	199.4	199.4
87.5°	15.1	21.2	39.3	42.3	69.4	87.7	87.7	93.6	93.6	90.6	87.7
90°	5.5	10.0	14.5	15.5	24.4	36.2	42.0	37.4	28.0	21.1	21.1
92.5°	22.1	59.8	97.5	106.8	150.2	208.0	236.9	207.6	149.1	105.2	101.0
95°	53.1	122.0	190.8	208.1	369.5	584.7	692.3	617.8	468.7	357.0	344.3
97.5°	91.9	152.6	213.4	228.6	497.7	856.6	1036.0	988.8	894.7	824.1	800.0
100°	121.8	176.8	232.0	245.7	544.4	942.6	1141.7	1145.1	1152.0	1157.2	1128.5
102.5°	147.2	198.6	250.0	262.9	565.7	969.7	1171.6	1231.5	1351.6	1441.7	1417.0
105°	190.4	234.0	277.4	288.3	581.6	972.7	1168.3	1302.8	1571.8	1773.6	1760.4
107.5°	234.7	275.3	315.8	326.0	584.6	929.4	1101.9	1289.5	1664.8	1946.4	1949.6
110°	264.6	301.2	337.8	347.0	580.1	891.0	1046.5	1256.3	1675.9	1990.6	2004.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	293.9	328.8	363.7	372.4	580.3	857.5	996.2	1210.9	1640.4	1962.4	1983.6
115°	338.1	370.3	402.6	410.6	585.6	819.1	935.8	1142.6	1556.4	1866.6	1896.0
117.5°	381.9	411.1	440.4	447.7	596.6	795.1	894.3	1081.0	1454.3	1734.4	1766.9
120°	407.3	434.8	462.4	469.3	605.4	786.9	877.7	1048.3	1389.5	1645.3	1676.9
122.5°	432.2	460.1	487.8	494.8	618.1	782.6	864.9	1018.6	1325.8	1556.2	1587.3
125°	470.4	495.8	521.0	527.4	635.3	779.2	851.1	981.6	1242.5	1438.3	1467.0
127.5°	501.4	527.0	552.5	559.0	652.5	777.2	839.5	951.5	1175.6	1343.7	1367.9
130°	518.0	545.5	573.1	579.9	665.0	778.5	835.1	934.8	1134.3	1283.9	1306.3
132.5°	535.1	562.7	590.3	597.2	675.2	779.2	831.2	920.5	1099.1	1233.0	1253.1
135°	560.6	585.6	610.8	617.1	686.2	778.5	824.6	899.4	1048.9	1161.0	1178.3
137.5°	586.6	611.4	636.3	642.5	702.8	783.3	823.4	886.6	1013.1	1107.9	1122.0
140°	608.2	631.1	653.9	659.6	712.9	784.1	819.6	874.2	983.4	1065.3	1078.6
142.5°	624.8	646.0	667.1	672.4	721.5	786.9	819.6	867.5	963.5	1035.4	1046.8
145°	650.3	668.8	687.1	691.8	732.6	786.9	814.1	853.3	931.8	990.6	999.2
147.5°	675.7	693.7	711.7	716.1	748.8	792.3	814.1	845.0	906.6	953.0	960.1
150°	692.3	708.6	724.8	728.8	757.2	795.1	814.1	840.1	892.3	931.4	937.2
152.5°	709.5	721.8	734.1	737.1	762.7	796.9	814.1	836.3	880.8	914.2	918.6
155°	734.9	744.0	753.1	755.4	775.0	801.0	814.1	831.7	867.2	893.8	896.6
157.5°	753.7	762.6	771.4	773.6	787.1	805.1	814.1	827.8	855.4	876.0	878.1
160°	766.5	773.4	780.2	781.9	792.6	806.9	814.1	825.9	849.5	867.2	868.3
162.5°	779.2	784.3	789.5	790.9	798.6	808.9	814.1	824.1	844.0	858.9	860.0
165°	793.0	797.6	802.4	803.5	807.0	811.7	814.1	821.2	835.5	846.2	847.4
167.5°	805.8	808.0	810.2	810.8	813.7	817.6	819.6	824.2	833.6	840.7	841.1
170°	814.1	816.3	818.5	819.1	819.2	819.5	819.6	824.2	833.6	840.7	840.7
172.5°	818.5	819.0	819.5	819.6	819.6	819.6	819.6	823.3	830.7	836.2	835.8
175°	824.6	824.6	824.6	824.6	822.9	820.7	819.6	821.9	826.7	830.1	830.1
177.5°	824.6	824.6	824.6	824.6	823.3	821.6	820.7	822.5	826.2	829.0	828.5
180°	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	939.6	939.6
2.5°	1003.0	997.0
5°	1290.0	1296.1
7.5°	1737.1	1734.2
10°	2160.1	2187.4
12.5°	2468.3	2474.3
15°	2655.6	2667.7
17.5°	2728.1	2731.1
20°	2731.1	2725.1
22.5°	2697.9	2691.9
25°	2658.7	2655.6
27.5°	2622.3	2625.4
30°	2607.3	2616.4
32.5°	2607.3	2622.3
35°	2613.3	2628.4
37.5°	2610.3	2628.4
40°	2598.2	2619.4
42.5°	2564.9	2580.1
45°	2513.6	2531.7
47.5°	2447.1	2459.3
50°	2362.6	2374.6
52.5°	2256.8	2259.8
55°	2129.9	2142.0
57.5°	1993.9	1997.0
60°	1842.9	1852.0
62.5°	1682.8	1682.8
65°	1513.6	1519.7
67.5°	1338.4	1353.5
70°	1160.1	1163.2
72.5°	984.9	984.9
75°	803.6	806.7
77.5°	631.4	631.4
80°	468.3	471.3
82.5°	323.3	329.3
85°	202.4	202.4
87.5°	93.6	84.6
90°	21.1	21.1
92.5°	84.3	67.5
95°	293.7	243.0
97.5°	703.5	607.1
100°	1013.7	898.8
102.5°	1318.7	1220.3
105°	1707.5	1654.6
107.5°	1962.3	1975.1
110°	2059.5	2114.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2068.1	2152.7
115°	2013.3	2130.6
117.5°	1897.0	2027.1
120°	1803.4	1929.8
122.5°	1712.0	1836.7
125°	1581.9	1696.8
127.5°	1464.8	1561.7
130°	1395.8	1485.3
132.5°	1333.2	1413.4
135°	1247.4	1316.5
137.5°	1178.6	1235.2
140°	1131.5	1184.3
142.5°	1092.3	1137.8
145°	1033.7	1068.1
147.5°	988.6	1017.1
150°	960.3	983.4
152.5°	936.0	953.5
155°	908.2	919.8
157.5°	886.2	894.3
160°	873.1	877.7
162.5°	864.4	868.9
165°	852.0	856.6
167.5°	843.1	845.0
170°	840.7	840.7
172.5°	834.1	832.4
175°	830.1	830.1
177.5°	826.6	824.6
180°	824.6	824.6



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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	6.79	7.77	7.67	8.68	9.83	19.97	20.95	20.85	21.85	23.01
	3H	7.50	8.38	8.39	9.30	10.48	21.81	22.70	22.71	23.61	24.79
	4H	7.81	8.64	8.71	9.56	10.75	22.47	23.30	23.37	24.22	25.41
	6H	8.06	8.83	8.98	9.76	10.96	22.90	23.67	23.82	24.60	25.80
	8H	8.13	8.87	9.06	9.82	11.02	23.03	23.76	23.95	24.71	25.91
	12H	8.16	8.86	9.09	9.80	11.02	23.10	23.80	24.03	24.74	25.97
4H	2H	14.02	14.85	14.93	15.77	16.96	20.25	21.09	21.17	22.01	23.20
	3H	15.60	16.30	16.52	17.25	18.45	22.31	23.01	23.24	23.96	25.17
	4H	15.70	16.34	16.63	17.28	18.51	23.08	23.72	24.02	24.67	25.90
	6H	15.71	16.27	16.66	17.24	18.47	23.63	24.18	24.58	25.16	26.38
	8H	15.69	16.21	16.64	17.18	18.42	23.80	24.31	24.75	25.28	26.52
	12H	15.66	16.12	16.63	17.11	18.36	23.89	24.36	24.87	25.35	26.59
8H	4H	17.15	17.67	18.10	18.63	19.88	23.15	23.67	24.11	24.64	25.88
	6H	17.40	17.83	18.38	18.84	20.08	23.79	24.22	24.77	25.23	26.47
	8H	17.42	17.80	18.40	18.79	20.05	24.01	24.39	25.00	25.39	26.65
	12H	17.39	17.73	18.38	18.72	20.02	24.16	24.50	25.15	25.49	26.79
12H	4H	17.30	17.77	18.27	18.75	20.00	23.11	23.58	24.08	24.56	25.81
	6H	17.66	18.04	18.64	19.04	20.30	23.77	24.15	24.76	25.15	26.41
	8H	17.73	18.07	18.73	19.06	20.37	24.01	24.34	25.00	25.33	26.64