

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: P936940

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

**Test Information**

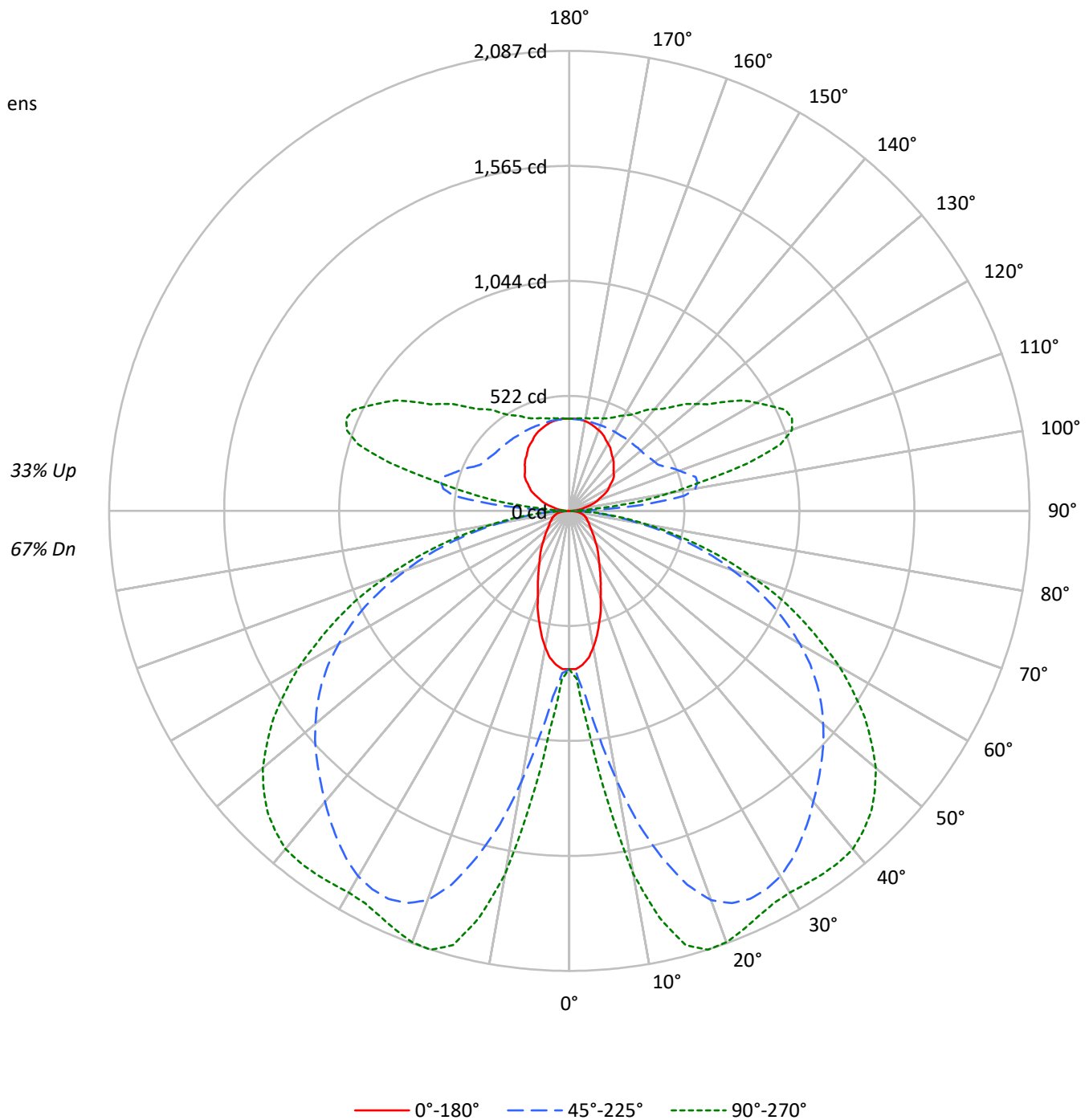
Test Method: LM-79-2019  
Report Number: P936940  
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8273.2 lumens  
Efficiency: N/A  
Efficacy: 98.5 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-Direct  
  
Input Watts (W): 84  
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

TEST NUMBER: P936940  
CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P936940

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

**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	50	30	10	50	30	10	50	30	10	0				
RCR																																		
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67																
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55																
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45																
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37																
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31																
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26																
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23																
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20																
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17																
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15																
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14																

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

	0°	45°	90°
0°	4442	4442	4442
5°	4338	5133	5971
10°	3933	7481	9899
15°	3342	9771	11953
20°	2719	11320	12182
25°	2268	11843	11934
30°	1912	11914	11912
35°	1689	11714	12220
40°	1471	11453	12538
45°	1331	11261	12587
50°	1220	11089	12379
55°	1167	10837	11830
60°	1193	10356	10964
65°	1241	9627	9773
70°	1318	8391	8257
75°	1456	6835	6443
80°	1579	4735	4342
85°	1377	2507	2222

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12587 cd/sqm



TEST NUMBER: P936940

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.9	1.1
10°-20°	411.7	5.0
20°-30°	720.1	8.7
30°-40°	927.0	11.2
40°-50°	1035.4	12.5
50°-60°	991.7	12.0
60°-70°	785.9	9.5
70°-80°	462.1	5.6
80°-90°	130.0	1.6
90°-100°	204.3	2.5
100°-110°	537.0	6.5
110°-120°	556.8	6.7
120°-130°	446.6	5.4
130°-140°	350.4	4.2
140°-150°	269.0	3.3
150°-160°	193.7	2.3
160°-170°	118.5	1.4
170°-180°	40.0	0.5
0°-30°	1224.7	14.8
0°-40°	2151.7	26.0
0°-60°	4178.7	50.5
0°-90°	5556.7	67.2
90°-120°	1298.1	15.7
90°-150°	2364.1	28.6
90°-180°	2716.0	32.8
0°-180°	8273.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	700	750	845	956	991	65
15°	524	968	1630	1976	2039	146
25°	335	1097	1942	2027	2030	154
35°	226	1048	1829	1933	2009	141
45°	155	836	1616	1852	1935	120
55°	111	531	1372	1593	1637	101
65°	88	282	1018	1145	1161	87
75°	65	173	559	614	616	68
85°	23	53	138	152	155	24
90°	3	8	21	11	11	4
95°	27	106	352	181	123	30
105°	97	146	594	901	841	103
115°	172	209	476	949	1083	170
125°	239	268	432	731	862	212
135°	285	314	419	590	669	220
145°	330	352	414	503	543	207
155°	374	384	414	454	467	172
165°	403	408	414	430	435	114
175°	419	419	416	422	422	40
180°	419	419	419	419	419	



TEST NUMBER: P936940

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1
2.5°	718.1	718.1	722.7	725.0	729.6	732.0	736.5	741.2	755.0	757.4	762.0
5°	699.6	708.9	738.9	750.5	782.7	826.6	845.1	875.1	937.5	955.9	967.5
7.5°	671.9	692.7	766.6	785.0	865.9	981.3	1029.8	1094.5	1193.7	1242.2	1281.5
10°	628.0	671.9	803.5	847.4	979.0	1154.5	1244.6	1334.6	1484.7	1551.7	1577.0
12.5°	579.5	651.1	842.8	902.8	1092.1	1348.4	1457.0	1556.2	1727.1	1817.2	1831.0
15°	524.1	621.1	879.7	967.5	1212.2	1510.1	1630.2	1752.5	1911.9	1976.5	1992.7
17.5°	475.6	598.0	914.4	1006.7	1304.6	1655.5	1777.9	1879.5	2008.8	2052.7	2064.2
20°	415.6	561.1	937.5	1057.5	1401.6	1761.8	1879.5	1958.0	2045.8	2073.4	2078.1
22.5°	371.8	521.9	951.3	1076.0	1466.2	1826.4	1925.7	1988.0	2048.0	2057.3	2059.6
25°	334.8	477.9	949.0	1096.7	1521.6	1865.7	1941.9	1988.0	2022.7	2027.3	2027.3
27.5°	300.2	429.4	939.7	1101.4	1563.2	1874.9	1934.9	1967.3	1983.4	1992.7	1992.7
30°	270.2	383.3	916.6	1092.1	1581.7	1865.7	1914.1	1930.3	1946.4	1960.4	1967.3
32.5°	247.1	339.4	882.0	1073.6	1584.0	1842.6	1877.2	1886.4	1909.5	1941.9	1953.4
35°	226.3	295.5	842.8	1048.3	1570.1	1805.6	1828.7	1837.9	1884.1	1932.6	1948.8
37.5°	205.5	263.2	792.0	1004.4	1549.3	1761.8	1777.9	1794.1	1865.7	1923.3	1941.9
40°	184.7	235.5	732.0	955.9	1517.0	1708.7	1722.5	1747.9	1842.6	1909.5	1928.0
42.5°	168.6	212.4	667.3	905.1	1475.4	1648.6	1669.4	1706.3	1814.8	1886.4	1907.2
45°	154.7	189.3	598.0	835.9	1422.3	1586.2	1616.2	1667.1	1782.5	1851.8	1870.3
47.5°	140.8	173.2	526.4	764.3	1364.6	1523.9	1563.2	1620.9	1738.7	1805.6	1821.8
50°	129.3	157.0	454.9	688.0	1302.2	1457.0	1503.2	1563.2	1683.3	1745.6	1766.3
52.5°	120.1	143.2	387.9	611.9	1230.6	1387.7	1440.8	1503.2	1616.2	1676.3	1690.2
55°	110.8	131.6	330.2	531.0	1156.8	1313.8	1371.6	1431.6	1542.4	1593.2	1602.4
57.5°	106.2	122.3	281.7	454.9	1078.3	1230.6	1295.3	1350.7	1454.7	1493.9	1503.2
60°	99.2	115.4	244.8	390.2	992.9	1152.1	1207.6	1263.0	1350.7	1383.1	1390.0
62.5°	92.3	110.8	217.0	327.8	905.1	1059.8	1115.2	1166.1	1239.9	1263.0	1272.2
65°	87.8	106.2	196.3	281.7	815.0	962.9	1018.2	1062.1	1122.1	1145.2	1149.9
67.5°	83.1	101.6	180.1	242.4	725.0	865.9	907.5	949.0	995.1	1018.2	1020.6
70°	76.2	97.0	166.3	214.8	632.7	755.0	789.7	833.5	870.5	882.0	889.0
72.5°	71.6	90.1	157.0	193.9	538.0	648.8	681.1	706.5	738.9	750.5	750.5
75°	64.7	80.8	147.8	173.2	441.0	531.0	558.8	584.2	609.5	614.2	607.3
77.5°	57.8	71.6	127.0	145.5	344.0	420.3	443.4	457.2	477.9	482.6	484.9
80°	48.5	62.3	99.2	113.2	249.3	309.4	325.6	337.1	355.6	355.6	360.2
82.5°	36.9	48.5	71.6	80.8	168.6	212.4	226.3	233.2	244.8	244.8	244.8
85°	23.1	30.0	46.2	53.1	101.6	129.3	138.5	140.8	150.1	152.4	152.4
87.5°	11.6	16.2	30.0	32.3	53.1	66.9	66.9	71.6	71.6	69.3	66.9
90°	2.8	5.1	7.4	7.9	12.4	18.4	21.4	19.0	14.2	10.6	10.6
92.5°	11.3	30.4	49.5	54.3	76.3	105.7	120.3	105.4	75.7	53.4	51.3
95°	27.0	61.9	97.0	105.7	187.7	297.2	351.8	314.0	238.2	181.4	174.9
97.5°	46.7	77.6	108.4	116.2	253.0	435.4	526.5	502.6	454.6	418.7	406.4
100°	61.9	89.9	117.9	124.9	276.6	479.0	580.2	581.9	585.4	588.1	573.5
102.5°	74.8	101.0	127.1	133.6	287.5	492.8	595.4	625.8	686.9	732.6	720.2
105°	96.8	118.9	141.0	146.5	295.5	494.3	593.6	662.0	798.8	901.4	894.6
107.5°	119.3	139.9	160.5	165.6	297.1	472.3	559.9	655.2	846.0	989.0	990.7
110°	134.4	153.0	171.6	176.3	294.8	452.8	531.8	638.4	851.7	1011.6	1018.6



TEST NUMBER: P936940

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	149.4	167.1	184.8	189.3	294.9	435.8	506.2	615.4	833.6	997.2	1008.0
115°	171.8	188.2	204.6	208.7	297.6	416.2	475.6	580.7	790.9	948.6	963.5
117.5°	194.0	208.9	223.8	227.5	303.2	404.1	454.5	549.3	739.1	881.3	897.9
120°	206.9	221.0	235.0	238.5	307.6	399.9	446.0	532.7	706.1	836.0	852.1
122.5°	219.7	233.8	247.9	251.4	314.1	397.7	439.5	517.6	673.8	790.8	806.7
125°	239.1	251.9	264.8	268.0	322.8	396.0	432.5	498.8	631.5	730.9	745.4
127.5°	254.8	267.8	280.8	284.1	331.6	395.0	426.6	483.6	597.4	682.8	695.1
130°	263.2	277.3	291.3	294.7	337.9	395.5	424.3	475.0	576.4	652.5	663.9
132.5°	272.0	286.0	300.0	303.5	343.1	396.0	422.4	467.8	558.5	626.6	636.7
135°	284.9	297.6	310.4	313.6	348.8	395.6	419.1	457.1	533.0	590.0	598.8
137.5°	298.1	310.7	323.3	326.5	357.1	398.0	418.4	450.5	514.8	563.0	570.2
140°	309.1	320.7	332.3	335.2	362.3	398.4	416.5	444.3	499.8	541.3	548.1
142.5°	317.5	328.2	338.9	341.7	366.6	399.9	416.5	440.9	489.6	526.1	532.0
145°	330.5	339.8	349.2	351.6	372.3	399.9	413.7	433.6	473.5	503.4	507.8
147.5°	343.4	352.5	361.7	363.9	380.5	402.6	413.7	429.3	460.7	484.3	487.9
150°	351.8	360.1	368.3	370.4	384.9	404.1	413.7	427.0	453.5	473.3	476.2
152.5°	360.5	366.8	373.0	374.6	387.6	405.0	413.7	425.0	447.6	464.6	466.7
155°	373.5	378.1	382.7	383.9	393.8	407.1	413.7	422.7	440.7	454.2	455.6
157.5°	383.0	387.5	392.1	393.1	400.0	409.2	413.7	420.7	434.7	445.2	446.2
160°	389.5	393.0	396.4	397.3	402.8	410.1	413.7	419.7	431.7	440.7	441.3
162.5°	396.0	398.6	401.2	401.9	405.8	411.1	413.7	418.8	428.9	436.4	437.0
165°	403.0	405.3	407.7	408.3	410.2	412.5	413.7	417.3	424.5	430.0	430.6
167.5°	409.4	410.5	411.7	412.0	413.5	415.5	416.5	418.9	423.6	427.2	427.4
170°	413.7	414.8	416.0	416.2	416.3	416.4	416.5	418.9	423.6	427.2	427.2
172.5°	416.0	416.2	416.4	416.5	416.5	416.5	416.5	418.3	422.1	424.9	424.7
175°	419.1	419.1	419.1	419.1	418.3	417.1	416.5	417.7	420.1	421.8	421.8
177.5°	419.1	419.1	419.1	419.1	418.4	417.5	417.1	418.0	419.9	421.3	421.0
180°	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1



TEST NUMBER: P936940

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	718.1	718.1
2.5°	766.6	762.0
5°	986.0	990.6
7.5°	1327.7	1325.3
10°	1650.9	1671.7
12.5°	1886.4	1891.0
15°	2029.6	2038.9
17.5°	2085.0	2087.3
20°	2087.3	2082.7
22.5°	2061.9	2057.3
25°	2031.9	2029.6
27.5°	2004.2	2006.5
30°	1992.7	1999.6
32.5°	1992.7	2004.2
35°	1997.3	2008.8
37.5°	1994.9	2008.8
40°	1985.7	2001.8
42.5°	1960.4	1971.9
45°	1921.1	1934.9
47.5°	1870.3	1879.5
50°	1805.6	1814.8
52.5°	1724.8	1727.1
55°	1627.8	1637.1
57.5°	1523.9	1526.2
60°	1408.5	1415.4
62.5°	1286.1	1286.1
65°	1156.8	1161.4
67.5°	1022.9	1034.4
70°	886.6	889.0
72.5°	752.7	752.7
75°	614.2	616.5
77.5°	482.6	482.6
80°	357.9	360.2
82.5°	247.1	251.7
85°	154.7	154.7
87.5°	71.6	64.7
90°	10.6	10.6
92.5°	42.8	34.3
95°	149.2	123.4
97.5°	357.5	308.5
100°	515.1	456.7
102.5°	670.1	620.1
105°	867.8	840.9
107.5°	997.1	1003.7
110°	1046.5	1074.6





TEST NUMBER: P936940

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1051.0	1093.9
115°	1023.1	1082.7
117.5°	964.0	1030.2
120°	916.4	980.7
122.5°	870.1	933.4
125°	803.8	862.2
127.5°	744.4	793.7
130°	709.3	754.8
132.5°	677.5	718.2
135°	633.9	669.0
137.5°	599.0	627.7
140°	574.9	601.8
142.5°	555.1	578.2
145°	525.3	542.8
147.5°	502.4	516.9
150°	488.0	499.8
152.5°	475.6	484.6
155°	461.5	467.4
157.5°	450.4	454.5
160°	443.6	446.0
162.5°	439.3	441.5
165°	433.0	435.4
167.5°	428.4	429.4
170°	427.2	427.2
172.5°	423.8	423.0
175°	421.8	421.8
177.5°	420.1	419.1
180°	419.1	419.1



TEST NUMBER: P936940

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-4000K

**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	7.61	8.70	8.39	9.52	10.52	20.77	21.87	21.56	22.69	23.68
	3H	8.33	9.32	9.13	10.14	11.17	22.63	23.61	23.42	24.44	25.47
	4H	8.64	9.58	9.46	10.41	11.45	23.28	24.21	24.09	25.05	26.08
	6H	8.90	9.77	9.73	10.61	11.66	23.72	24.58	24.54	25.42	26.47
	8H	8.98	9.80	9.82	10.66	11.72	23.84	24.67	24.68	25.53	26.58
	12H	9.00	9.79	9.85	10.64	11.73	23.92	24.70	24.76	25.56	26.64
4H	2H	14.84	15.78	15.66	16.61	17.65	21.08	22.01	21.90	22.84	23.88
	3H	16.43	17.22	17.27	18.08	19.14	23.14	23.92	23.97	24.79	25.84
	4H	16.54	17.25	17.38	18.12	19.20	23.91	24.63	24.76	25.49	26.57
	6H	16.56	17.18	17.42	18.07	19.16	24.46	25.08	25.32	25.97	27.06
	8H	16.55	17.13	17.41	18.01	19.11	24.63	25.21	25.49	26.09	27.19
	12H	16.51	17.04	17.40	17.94	19.05	24.73	25.25	25.62	26.16	27.26
8H	4H	18.00	18.58	18.87	19.46	20.56	23.99	24.57	24.86	25.46	26.56
	6H	18.25	18.74	19.15	19.66	20.76	24.63	25.11	25.52	26.04	27.14
	8H	18.27	18.70	19.18	19.62	20.74	24.85	25.28	25.75	26.20	27.31
	12H	18.25	18.63	19.16	19.54	20.71	25.00	25.38	25.91	26.29	27.46
12H	4H	18.15	18.68	19.04	19.58	20.69	23.96	24.48	24.84	25.38	26.49
	6H	18.51	18.94	19.42	19.86	20.98	24.62	25.05	25.52	25.96	27.08
	8H	18.60	18.97	19.50	19.88	21.05	24.85	25.23	25.76	26.14	27.31