

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: P936625

Luminaire Tested: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

**Test Information**

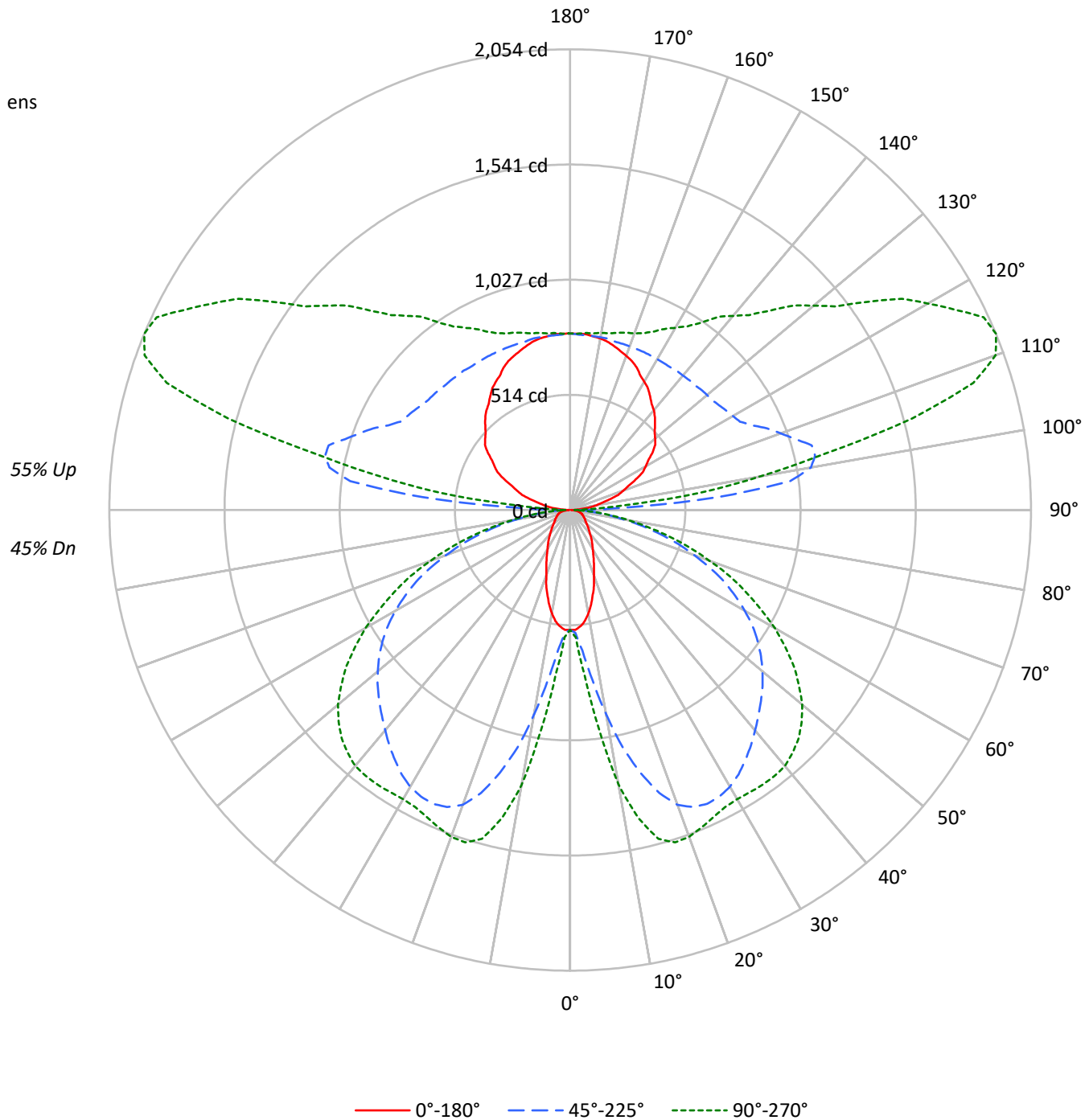
Test Method: LM-79-2019  
Report Number: P936625  
REPORT IS A COMBINATION OF REPORTS P933461 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9239.1 lumens  
Efficiency: N/A  
Efficacy: 108.4 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 85.2  
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: P936625  
CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P936625

CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

**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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

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

	0°	45°	90°
0°	1653	1653	1653
5°	1616	1911	2222
10°	1466	2787	3684
15°	1247	3642	4448
20°	1015	4221	4534
25°	847	4418	4442
30°	715	4448	4433
35°	632	4375	4548
40°	551	4280	4666
45°	499	4211	4684
50°	459	4149	4607
55°	440	4058	4403
60°	451	3882	4080
65°	470	3613	3637
70°	501	3153	3073
75°	557	2573	2398
80°	614	1786	1616
85°	557	949	827

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4684 cd/sqm



TEST NUMBER: P936625

CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	0.7
10°-20°	306.4	3.3
20°-30°	536.0	5.8
30°-40°	690.0	7.5
40°-50°	770.7	8.3
50°-60°	738.1	8.0
60°-70°	585.0	6.3
70°-80°	344.0	3.7
80°-90°	98.6	1.1
90°-100°	383.6	4.2
100°-110°	1008.4	10.9
110°-120°	1045.6	11.3
120°-130°	838.7	9.1
130°-140°	658.1	7.1
140°-150°	505.1	5.5
150°-160°	363.8	3.9
160°-170°	222.6	2.4
170°-180°	75.2	0.8
0°-30°	911.6	9.9
0°-40°	1601.5	17.3
0°-60°	3110.3	33.7
0°-90°	4137.8	44.8
90°-120°	2437.7	26.4
90°-150°	4439.6	48.1
90°-180°	5101.0	55.2
0°-180°	9239.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	521	558	629	712	737	48
15°	390	720	1213	1471	1518	109
25°	249	816	1445	1509	1511	115
35°	168	780	1361	1438	1495	105
45°	115	622	1203	1378	1440	89
55°	82	395	1021	1186	1218	75
65°	65	210	758	852	864	65
75°	48	129	416	457	459	50
85°	17	40	103	113	115	18
90°	5	15	40	20	20	6
95°	51	199	661	341	232	56
105°	182	275	1115	1693	1579	193
115°	323	392	893	1781	2033	319
125°	449	503	812	1373	1619	399
135°	535	589	787	1108	1256	414
145°	620	660	777	945	1019	389
155°	701	721	777	853	878	322
165°	757	767	777	808	818	214
175°	787	787	782	792	792	75
180°	787	787	787	787	787	



TEST NUMBER: P936625  
 CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5
2.5°	534.5	534.5	537.9	539.6	543.1	544.8	548.3	551.7	562.0	563.7	567.1
5°	520.8	527.6	550.0	558.5	582.6	615.2	629.0	651.4	697.7	711.5	720.1
7.5°	500.1	515.6	570.6	584.3	644.5	730.5	766.5	814.7	888.5	924.6	953.8
10°	467.5	500.1	598.1	630.8	728.7	859.3	926.3	993.4	1105.1	1155.0	1173.8
12.5°	431.3	484.6	627.3	671.9	812.9	1003.7	1084.5	1158.4	1285.5	1352.6	1362.8
15°	390.2	462.3	654.8	720.1	902.3	1123.9	1213.4	1304.4	1423.1	1471.2	1483.2
17.5°	354.0	445.1	680.6	749.3	971.1	1232.3	1323.3	1399.0	1495.2	1527.9	1536.5
20°	309.4	417.7	697.7	787.2	1043.2	1311.3	1399.0	1457.4	1522.7	1543.3	1546.7
22.5°	276.7	388.4	708.1	800.9	1091.3	1359.4	1433.3	1479.8	1524.4	1531.3	1533.0
25°	249.2	355.7	706.4	816.4	1132.6	1388.6	1445.4	1479.8	1505.5	1509.0	1509.0
27.5°	223.4	319.7	699.4	819.8	1163.5	1395.6	1440.2	1464.2	1476.3	1483.2	1483.2
30°	201.1	285.3	682.3	812.9	1177.2	1388.6	1424.8	1436.8	1448.8	1459.1	1464.2
32.5°	183.9	252.7	656.5	799.1	1179.0	1371.5	1397.3	1404.1	1421.3	1445.4	1454.0
35°	168.4	220.0	627.3	780.2	1168.7	1344.0	1361.1	1368.1	1402.4	1438.5	1450.5
37.5°	153.0	195.9	589.5	747.6	1153.2	1311.3	1323.3	1335.3	1388.6	1431.6	1445.4
40°	137.5	175.3	544.8	711.5	1129.2	1271.8	1282.1	1301.0	1371.5	1421.3	1435.0
42.5°	125.5	158.1	496.7	673.7	1098.2	1227.1	1242.6	1270.1	1350.8	1404.1	1419.6
45°	115.1	140.9	445.1	622.1	1058.7	1180.7	1203.0	1240.9	1326.8	1378.3	1392.1
47.5°	104.8	128.9	391.9	568.8	1015.7	1134.3	1163.5	1206.5	1294.1	1344.0	1356.0
50°	96.3	116.8	338.6	512.1	969.3	1084.5	1118.8	1163.5	1252.9	1299.3	1314.8
52.5°	89.3	106.6	288.7	455.4	916.1	1032.9	1072.4	1118.8	1203.0	1247.7	1258.0
55°	82.5	98.0	245.7	395.3	861.0	977.9	1020.9	1065.5	1148.0	1185.9	1192.7
57.5°	79.1	91.1	209.7	338.6	802.6	916.1	964.1	1005.4	1082.7	1112.0	1118.8
60°	73.9	85.9	182.2	290.5	739.0	857.6	898.9	940.1	1005.4	1029.5	1034.6
62.5°	68.8	82.5	161.5	244.0	673.7	788.9	830.1	867.9	922.9	940.1	947.0
65°	65.3	79.1	146.1	209.7	606.7	716.7	758.0	790.6	835.3	852.4	855.8
67.5°	61.8	75.6	134.0	180.5	539.6	644.5	675.4	706.4	740.7	758.0	759.7
70°	56.7	72.2	123.8	159.8	470.9	562.0	587.8	620.4	647.9	656.5	661.7
72.5°	53.3	67.0	116.8	144.3	400.4	482.9	507.0	525.9	550.0	558.5	558.5
75°	48.1	60.1	110.0	128.9	328.2	395.3	415.9	434.8	453.7	457.1	452.0
77.5°	43.0	53.3	94.6	108.3	256.1	312.8	329.9	340.3	355.7	359.2	360.9
80°	36.1	46.4	73.9	84.2	185.6	230.3	242.3	250.9	264.7	264.7	268.1
82.5°	27.5	36.1	53.3	60.1	125.5	158.1	168.4	173.6	182.2	182.2	182.2
85°	17.2	22.4	34.3	39.5	75.6	96.3	103.1	104.8	111.7	113.4	113.4
87.5°	8.6	12.0	22.4	24.1	39.5	49.9	49.9	53.3	53.3	51.6	49.9
90°	5.3	9.5	13.8	14.8	23.2	34.5	40.1	35.7	26.7	20.1	20.1
92.5°	21.1	57.0	92.9	101.9	143.2	198.4	226.0	198.1	142.2	100.4	96.3
95°	50.7	116.4	182.2	198.6	352.6	558.0	660.7	589.5	447.3	340.6	328.5
97.5°	87.6	145.6	203.6	218.1	475.0	817.4	988.7	943.7	853.8	786.4	763.4
100°	116.2	168.8	221.3	234.5	519.5	899.5	1089.5	1092.8	1099.3	1104.3	1076.9
102.5°	140.5	189.5	238.6	250.9	539.9	925.4	1118.1	1175.3	1289.8	1375.7	1352.3
105°	181.7	223.2	264.7	275.1	555.0	928.3	1114.9	1243.3	1500.0	1692.6	1680.0
107.5°	224.0	262.6	301.4	311.1	557.9	887.0	1051.5	1230.6	1588.8	1857.5	1860.5
110°	252.5	287.4	322.4	331.1	553.6	850.4	998.7	1198.9	1599.4	1899.7	1912.8



TEST NUMBER: P936625

CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	280.4	313.7	347.0	355.4	553.8	818.3	950.6	1155.5	1565.4	1872.8	1892.9
115°	322.7	353.4	384.2	391.9	558.9	781.7	893.1	1090.5	1485.2	1781.4	1809.4
117.5°	364.4	392.3	420.2	427.2	569.3	758.7	853.4	1031.6	1387.9	1655.1	1686.1
120°	388.7	415.0	441.2	447.8	577.7	751.0	837.6	1000.4	1325.9	1570.1	1600.3
122.5°	412.5	439.0	465.5	472.2	589.9	746.9	825.4	972.0	1265.2	1485.1	1514.8
125°	448.9	473.1	497.3	503.3	606.3	743.6	812.3	936.8	1185.8	1372.6	1400.0
127.5°	478.5	502.9	527.3	533.4	622.7	741.6	801.2	908.1	1121.9	1282.3	1305.4
130°	494.4	520.7	546.9	553.5	634.6	742.8	797.0	892.1	1082.5	1225.2	1246.6
132.5°	510.7	537.0	563.3	569.9	644.4	743.6	793.2	878.5	1048.9	1176.6	1195.8
135°	535.0	558.9	582.9	588.8	654.9	742.9	786.9	858.3	1001.0	1108.1	1124.5
137.5°	559.8	583.5	607.3	613.2	670.7	747.5	785.9	846.2	966.9	1057.3	1070.8
140°	580.4	602.2	624.0	629.5	680.4	748.2	782.1	834.2	938.5	1016.7	1029.3
142.5°	596.3	616.4	636.7	641.7	688.5	750.9	782.1	827.9	919.5	988.1	999.0
145°	620.5	638.1	655.7	660.2	699.1	750.9	776.9	814.3	889.2	945.3	953.5
147.5°	644.9	661.9	679.1	683.4	714.6	756.2	776.9	806.4	865.3	909.5	916.3
150°	660.7	676.1	691.7	695.5	722.7	758.8	776.9	801.8	851.5	888.8	894.4
152.5°	677.1	688.8	700.6	703.5	728.0	760.6	776.9	798.2	840.6	872.5	876.7
155°	701.3	710.0	718.7	720.9	739.6	764.4	776.9	793.8	827.6	852.9	855.7
157.5°	719.3	727.8	736.2	738.3	751.2	768.4	776.9	790.1	816.3	836.0	838.0
160°	731.5	738.1	744.6	746.3	756.5	770.1	776.9	788.2	810.7	827.6	828.7
162.5°	743.6	748.6	753.5	754.7	762.1	772.0	776.9	786.4	805.4	819.6	820.6
165°	756.8	761.3	765.7	766.8	770.2	774.7	776.9	783.7	797.3	807.5	808.6
167.5°	769.0	771.0	773.2	773.7	776.5	780.2	782.1	786.6	795.5	802.2	802.7
170°	776.9	779.0	781.1	781.6	781.8	782.0	782.1	786.6	795.5	802.2	802.2
172.5°	781.1	781.5	782.0	782.1	782.1	782.1	782.1	785.6	792.7	798.0	797.6
175°	786.9	786.9	786.9	786.9	785.3	783.1	782.1	784.3	788.9	792.2	792.2
177.5°	786.9	786.9	786.9	786.9	785.7	784.1	783.2	785.0	788.5	791.2	790.7
180°	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9



TEST NUMBER: P936625

CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	534.5	534.5
2.5°	570.6	567.1
5°	733.9	737.3
7.5°	988.2	986.5
10°	1228.8	1244.3
12.5°	1404.1	1407.5
15°	1510.7	1517.5
17.5°	1552.0	1553.7
20°	1553.7	1550.2
22.5°	1534.7	1531.3
25°	1512.4	1510.7
27.5°	1491.7	1493.5
30°	1483.2	1488.3
32.5°	1483.2	1491.7
35°	1486.6	1495.2
37.5°	1484.9	1495.2
40°	1478.0	1490.0
42.5°	1459.1	1467.7
45°	1429.9	1440.2
47.5°	1392.1	1399.0
50°	1344.0	1350.8
52.5°	1283.8	1285.5
55°	1211.7	1218.5
57.5°	1134.3	1136.0
60°	1048.4	1053.5
62.5°	957.3	957.3
65°	861.0	864.5
67.5°	761.4	769.9
70°	660.0	661.7
72.5°	560.3	560.3
75°	457.1	458.8
77.5°	359.2	359.2
80°	266.4	268.1
82.5°	183.9	187.3
85°	115.1	115.1
87.5°	53.3	48.1
90°	20.1	20.1
92.5°	80.4	64.4
95°	280.2	231.8
97.5°	671.3	579.4
100°	967.3	857.7
102.5°	1258.4	1164.5
105°	1629.6	1579.1
107.5°	1872.7	1884.9
110°	1965.3	2018.0





TEST NUMBER: P936625  
CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1973.7	2054.4
115°	1921.4	2033.3
117.5°	1810.3	1934.5
120°	1721.0	1841.6
122.5°	1633.9	1752.8
125°	1509.6	1619.3
127.5°	1397.9	1490.4
130°	1332.1	1417.5
132.5°	1272.3	1348.8
135°	1190.5	1256.4
137.5°	1124.8	1178.8
140°	1079.7	1130.2
142.5°	1042.5	1085.9
145°	986.4	1019.3
147.5°	943.5	970.7
150°	916.4	938.5
152.5°	893.3	910.0
155°	866.8	877.8
157.5°	845.7	853.4
160°	833.2	837.6
162.5°	824.9	829.2
165°	813.1	817.6
167.5°	804.6	806.5
170°	802.2	802.2
172.5°	796.0	794.3
175°	792.2	792.2
177.5°	788.8	786.9
180°	786.9	786.9



TEST NUMBER: P936625  
 CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-2700K

**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	2.26	3.11	3.26	4.12	5.46	15.45	16.30	16.45	17.31	18.65
	3H	2.97	3.73	3.97	4.75	6.11	17.30	18.06	18.30	19.08	20.44
	4H	3.26	3.99	4.28	5.01	6.38	17.95	18.67	18.96	19.69	21.06
	6H	3.51	4.18	4.54	5.21	6.59	18.38	19.05	19.41	20.07	21.46
	8H	3.58	4.22	4.61	5.26	6.64	18.50	19.14	19.54	20.18	21.56
	12H	3.60	4.20	4.64	5.24	6.64	18.57	19.18	19.61	20.21	21.62
4H	2H	9.48	10.21	10.51	11.23	12.60	15.73	16.45	16.75	17.47	18.84
	3H	11.05	11.66	12.08	12.71	14.09	17.78	18.38	18.81	19.43	20.81
	4H	11.14	11.70	12.18	12.74	14.15	18.55	19.10	19.58	20.14	21.55
	6H	11.15	11.63	12.20	12.70	14.10	19.09	19.57	20.14	20.63	22.03
	8H	11.13	11.58	12.18	12.64	14.05	19.25	19.70	20.30	20.76	22.17
	12H	11.09	11.49	12.16	12.56	13.99	19.35	19.75	20.42	20.83	22.25
8H	4H	12.59	13.04	13.64	14.10	15.51	18.60	19.05	19.65	20.11	21.53
	6H	12.83	13.20	13.91	14.30	15.72	19.24	19.61	20.31	20.71	22.12
	8H	12.85	13.18	13.93	14.26	15.69	19.46	19.79	20.54	20.87	22.30
	12H	12.82	13.10	13.90	14.18	15.66	19.61	19.89	20.69	20.97	22.45
12H	4H	12.73	13.14	13.80	14.21	15.63	18.56	18.96	19.63	20.03	21.46
	6H	13.09	13.42	14.17	14.50	15.93	19.22	19.55	20.30	20.63	22.06
	8H	13.16	13.45	14.25	14.53	16.00	19.45	19.74	20.54	20.82	22.29