

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: P936326

Luminaire Tested: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

**Test Information**

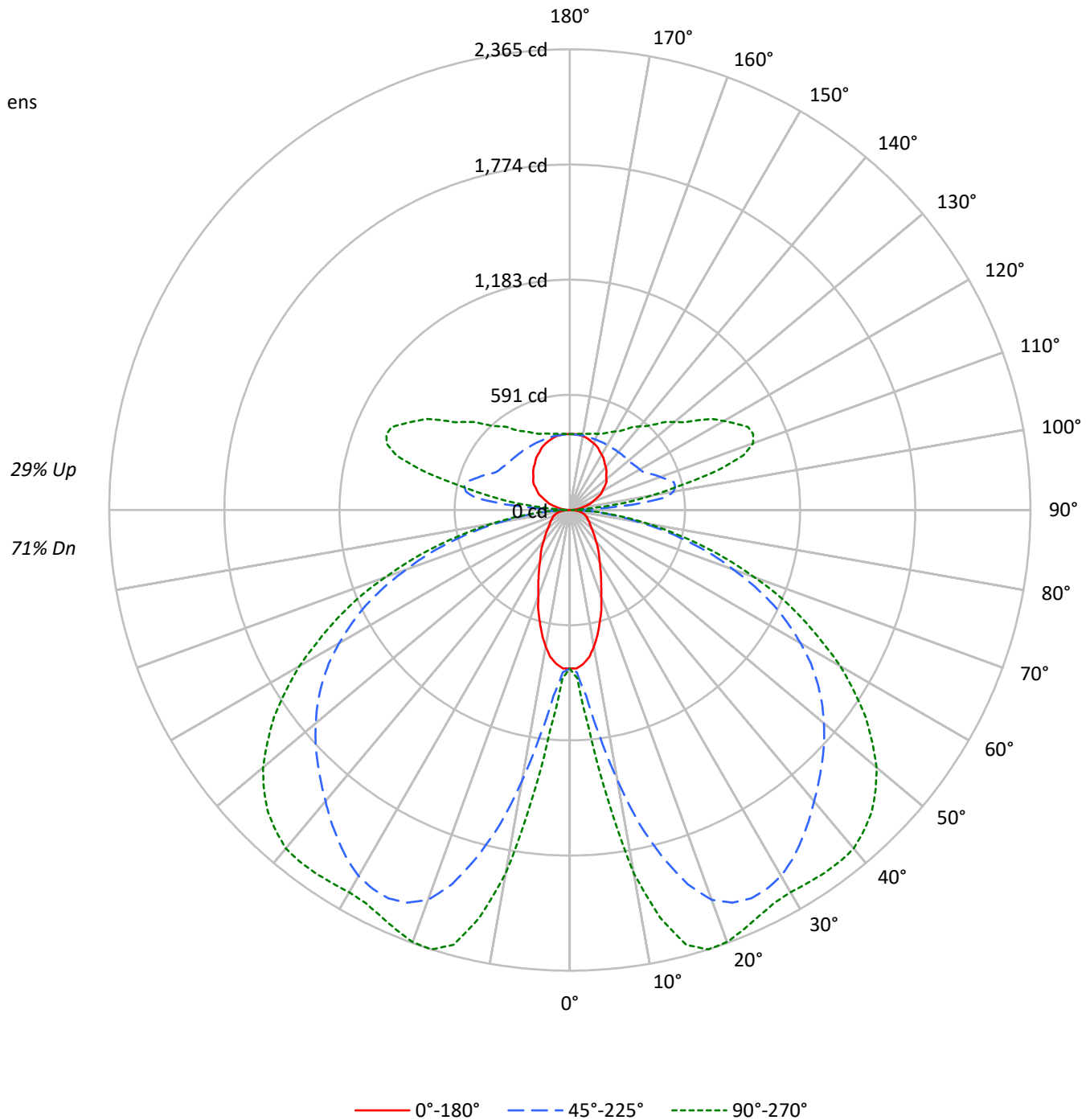
Test Method: LM-79-2019  
Report Number: P936326  
REPORT IS A COMBINATION OF REPORTS P933430 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8826.7 lumens  
Efficiency: N/A  
Efficacy: 98.1 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: Semi-Direct  
  
Input Watts (W): 90  
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

TEST NUMBER: P936326  
CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P936326

CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

**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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71		
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	58		
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	48		
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	39		
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	33		
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28		
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	24		
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	21		
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18		
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	16		
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	14		

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

	0°	45°	90°
0°	2517	2517	2517
5°	2459	2909	3383
10°	2232	4242	5608
15°	1898	5544	6772
20°	1545	6426	6901
25°	1289	6726	6761
30°	1088	6770	6748
35°	963	6659	6923
40°	839	6515	7103
45°	760	6410	7131
50°	698	6316	7013
55°	669	6178	6702
60°	686	5909	6211
65°	715	5499	5537
70°	763	4799	4678
75°	850	3916	3650
80°	934	2719	2459
85°	849	1446	1259

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7131 cd/sqm



TEST NUMBER: P936326

CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.2	1.2
10°-20°	466.5	5.3
20°-30°	815.9	9.2
30°-40°	1050.3	11.9
40°-50°	1173.2	13.3
50°-60°	1123.6	12.7
60°-70°	890.5	10.1
70°-80°	523.6	5.9
80°-90°	147.0	1.7
90°-100°	190.3	2.2
100°-110°	500.3	5.7
110°-120°	518.8	5.9
120°-130°	416.1	4.7
130°-140°	326.5	3.7
140°-150°	250.6	2.8
150°-160°	180.5	2.0
160°-170°	110.4	1.3
170°-180°	37.3	0.4
0°-30°	1387.6	15.7
0°-40°	2437.9	27.6
0°-60°	4734.8	53.6
0°-90°	6295.8	71.3
90°-120°	1209.4	13.7
90°-150°	2202.7	25.0
90°-180°	2531.0	28.7
0°-180°	8826.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	793	850	958	1083	1122	73
15°	594	1096	1847	2240	2310	165
25°	379	1243	2200	2297	2300	175
35°	256	1188	2072	2190	2276	160
45°	175	947	1831	2098	2192	136
55°	126	602	1554	1805	1855	114
65°	99	319	1154	1298	1316	99
75°	73	196	633	696	698	77
85°	26	60	157	173	175	28
90°	3	7	20	10	10	4
95°	25	98	328	169	115	28
105°	90	136	553	840	783	96
115°	160	194	443	884	1009	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	328	385	469	506	193
155°	348	358	385	423	436	160
165°	376	380	385	401	406	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	



TEST NUMBER: P936326

CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6
2.5°	813.6	813.6	818.8	821.5	826.7	829.3	834.5	839.8	855.5	858.1	863.3
5°	792.7	803.1	837.2	850.2	886.9	936.6	957.5	991.6	1062.2	1083.2	1096.2
7.5°	761.3	784.8	868.5	889.5	981.0	1111.9	1166.9	1240.1	1352.6	1407.6	1452.0
10°	711.6	761.3	910.4	960.1	1109.3	1308.1	1410.2	1512.2	1682.2	1758.1	1786.9
12.5°	656.6	737.7	954.9	1023.0	1237.5	1527.9	1650.8	1763.3	1956.9	2059.0	2074.7
15°	593.9	703.7	996.8	1096.2	1373.5	1711.0	1847.1	1985.7	2166.2	2239.5	2257.8
17.5°	538.9	677.6	1036.1	1140.7	1478.2	1875.8	2014.5	2129.6	2276.1	2325.8	2338.9
20°	470.9	635.7	1062.2	1198.3	1588.1	1996.2	2129.6	2218.5	2318.0	2349.3	2354.6
22.5°	421.2	591.2	1077.9	1219.2	1661.3	2069.4	2181.9	2252.6	2320.6	2331.0	2333.7
25°	379.3	541.5	1075.3	1242.7	1724.1	2113.9	2200.2	2252.6	2291.8	2297.0	2297.0
27.5°	340.1	486.6	1064.8	1248.0	1771.2	2124.4	2192.4	2229.0	2247.3	2257.8	2257.8
30°	306.1	434.3	1038.7	1237.5	1792.1	2113.9	2168.8	2187.1	2205.5	2221.2	2229.0
32.5°	279.9	384.6	999.4	1216.6	1794.7	2087.7	2127.0	2137.4	2163.6	2200.2	2213.3
35°	256.4	334.9	954.9	1187.8	1779.0	2045.9	2072.0	2082.5	2134.8	2189.8	2208.1
37.5°	232.8	298.2	897.3	1138.1	1755.5	1996.2	2014.5	2032.8	2113.9	2179.3	2200.2
40°	209.3	266.8	829.3	1083.2	1718.9	1936.0	1951.7	1980.5	2087.7	2163.6	2184.5
42.5°	191.0	240.7	756.1	1025.6	1671.8	1868.0	1891.5	1933.4	2056.3	2137.4	2161.0
45°	175.3	214.5	677.6	947.0	1611.6	1797.3	1831.4	1888.9	2019.7	2098.2	2119.1
47.5°	159.6	196.2	596.5	865.9	1546.2	1726.7	1771.2	1836.6	1970.0	2045.9	2064.2
50°	146.5	177.9	515.4	779.6	1475.6	1650.8	1703.2	1771.2	1907.2	1977.9	2001.4
52.5°	136.0	162.2	439.5	693.3	1394.5	1572.4	1632.5	1703.2	1831.4	1899.4	1915.1
55°	125.6	149.1	374.1	601.7	1310.8	1488.6	1554.1	1622.1	1747.6	1805.2	1815.7
57.5°	120.3	138.7	319.2	515.4	1221.8	1394.5	1467.7	1530.5	1648.2	1692.7	1703.2
60°	112.5	130.8	277.3	442.1	1125.0	1305.5	1368.3	1431.1	1530.5	1567.1	1575.0
62.5°	104.6	125.6	245.9	371.5	1025.6	1200.9	1263.7	1321.2	1404.9	1431.1	1441.6
65°	99.4	120.3	222.4	319.2	923.5	1091.0	1153.8	1203.5	1271.5	1297.7	1302.9
67.5°	94.2	115.1	204.1	274.7	821.5	981.0	1028.2	1075.3	1127.6	1153.8	1156.4
70°	86.3	109.9	188.4	243.3	716.8	855.5	894.7	944.4	986.3	999.4	1007.3
72.5°	81.1	102.0	177.9	219.8	609.6	735.1	771.8	800.5	837.2	850.2	850.2
75°	73.3	91.6	167.4	196.2	499.7	601.7	633.1	661.9	690.7	695.9	688.0
77.5°	65.4	81.1	143.9	164.8	389.8	476.1	502.3	518.0	541.5	546.8	549.4
80°	54.9	70.6	112.5	128.2	282.5	350.6	368.9	382.0	402.9	402.9	408.1
82.5°	41.9	54.9	81.1	91.6	191.0	240.7	256.4	264.2	277.3	277.3	277.3
85°	26.2	34.0	52.3	60.2	115.1	146.5	157.0	159.6	170.0	172.7	172.7
87.5°	13.1	18.3	34.0	36.6	60.2	75.9	75.9	81.1	81.1	78.5	75.9
90°	2.6	4.7	6.8	7.3	11.5	17.1	19.9	17.7	13.3	9.9	9.9
92.5°	10.5	28.3	46.1	50.6	71.1	98.5	112.1	98.3	70.5	49.8	47.8
95°	25.1	57.7	90.3	98.5	174.9	276.9	327.8	292.5	221.9	169.0	163.0
97.5°	43.5	72.3	101.1	108.2	235.6	405.6	490.5	468.2	423.6	390.1	378.7
100°	57.6	83.7	109.8	116.3	257.8	446.3	540.6	542.2	545.5	547.9	534.3
102.5°	69.7	94.0	118.3	124.4	267.9	459.1	554.7	583.1	639.9	682.5	670.9
105°	90.2	110.7	131.3	136.5	275.4	460.5	553.1	616.8	744.2	839.8	833.5
107.5°	111.1	130.3	149.6	154.4	276.8	440.0	521.7	610.5	788.2	921.6	923.0
110°	125.2	142.6	159.9	164.3	274.7	421.9	495.5	594.8	793.5	942.5	949.0



TEST NUMBER: P936326

CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	139.2	155.7	172.2	176.3	274.8	406.0	471.7	573.4	776.6	929.2	939.2
115°	160.1	175.4	190.6	194.5	277.3	387.8	443.1	541.0	736.9	883.8	897.7
117.5°	180.8	194.6	208.5	212.0	282.5	376.5	423.5	511.9	688.6	821.2	836.6
120°	192.8	205.9	219.0	222.2	286.6	372.5	415.5	496.3	657.9	779.0	794.0
122.5°	204.7	217.8	230.9	234.2	292.7	370.5	409.5	482.2	627.7	736.8	751.5
125°	222.7	234.8	246.8	249.8	300.9	369.0	403.0	464.7	588.3	681.0	694.6
127.5°	237.4	249.5	261.6	264.7	309.0	368.0	397.5	450.5	556.6	636.1	647.7
130°	245.2	258.3	271.4	274.6	314.9	368.5	395.4	442.6	537.1	607.9	618.5
132.5°	253.4	266.4	279.5	282.7	319.7	369.0	393.5	435.8	520.4	583.8	593.3
135°	265.4	277.3	289.2	292.1	324.9	368.6	390.4	425.8	496.6	549.7	557.9
137.5°	277.7	289.5	301.2	304.2	332.8	370.9	389.9	419.8	479.6	524.5	531.2
140°	287.9	298.8	309.7	312.4	337.6	371.2	388.1	413.9	465.6	504.4	510.7
142.5°	295.8	305.8	315.9	318.4	341.6	372.5	388.1	410.7	456.2	490.3	495.7
145°	307.9	316.6	325.4	327.5	346.8	372.5	385.4	404.0	441.2	469.0	473.1
147.5°	319.9	328.4	337.0	339.0	354.5	375.1	385.4	400.1	429.3	451.2	454.6
150°	327.8	335.5	343.1	345.1	358.5	376.5	385.4	397.8	422.5	441.0	443.7
152.5°	335.9	341.8	347.5	349.0	361.1	377.3	385.4	396.0	417.1	432.9	435.0
155°	347.9	352.2	356.6	357.6	366.9	379.2	385.4	393.8	410.6	423.2	424.6
157.5°	356.8	361.0	365.3	366.3	372.7	381.2	385.4	392.0	405.0	414.7	415.7
160°	362.9	366.2	369.5	370.3	375.3	382.0	385.4	391.0	402.2	410.6	411.1
162.5°	369.0	371.4	373.8	374.5	378.1	383.0	385.4	390.1	399.6	406.6	407.2
165°	375.5	377.7	379.9	380.5	382.1	384.3	385.4	388.8	395.6	400.6	401.1
167.5°	381.5	382.6	383.6	383.9	385.3	387.1	388.1	390.2	394.7	398.0	398.3
170°	385.4	386.5	387.5	387.8	387.9	388.0	388.1	390.2	394.7	398.0	398.0
172.5°	387.5	387.8	388.0	388.1	388.1	388.1	388.1	389.8	393.3	395.9	395.7
175°	390.4	390.4	390.4	390.4	389.6	388.6	388.1	389.2	391.4	393.0	393.0
177.5°	390.4	390.4	390.4	390.4	389.8	389.0	388.6	389.5	391.2	392.5	392.2
180°	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4



TEST NUMBER: P936326

CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	813.6	813.6
2.5°	868.5	863.3
5°	1117.2	1122.4
7.5°	1504.3	1501.7
10°	1870.6	1894.1
12.5°	2137.4	2142.7
15°	2299.6	2310.1
17.5°	2362.4	2365.0
20°	2365.0	2359.8
22.5°	2336.3	2331.0
25°	2302.3	2299.6
27.5°	2270.9	2273.5
30°	2257.8	2265.6
32.5°	2257.8	2270.9
35°	2263.0	2276.1
37.5°	2260.4	2276.1
40°	2249.9	2268.2
42.5°	2221.2	2234.2
45°	2176.7	2192.4
47.5°	2119.1	2129.6
50°	2045.9	2056.3
52.5°	1954.3	1956.9
55°	1844.4	1854.9
57.5°	1726.7	1729.3
60°	1595.9	1603.8
62.5°	1457.3	1457.3
65°	1310.8	1316.0
67.5°	1159.0	1172.1
70°	1004.7	1007.3
72.5°	852.8	852.8
75°	695.9	698.5
77.5°	546.8	546.8
80°	405.5	408.1
82.5°	279.9	285.2
85°	175.3	175.3
87.5°	81.1	73.3
90°	9.9	9.9
92.5°	39.9	32.0
95°	139.0	115.0
97.5°	333.1	287.4
100°	480.0	425.6
102.5°	624.3	577.7
105°	808.5	783.4
107.5°	929.2	935.2
110°	975.1	1001.2





TEST NUMBER: P936326

CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	979.2	1019.2
115°	953.2	1008.8
117.5°	898.2	959.8
120°	853.8	913.6
122.5°	810.6	869.7
125°	748.9	803.3
127.5°	693.5	739.4
130°	660.9	703.3
132.5°	631.3	669.2
135°	590.6	623.3
137.5°	558.0	584.9
140°	535.7	560.7
142.5°	517.2	538.7
145°	489.4	505.7
147.5°	468.1	481.6
150°	454.7	465.6
152.5°	443.2	451.5
155°	430.0	435.5
157.5°	419.6	423.5
160°	413.3	415.5
162.5°	409.2	411.3
165°	403.4	405.6
167.5°	399.1	400.1
170°	398.0	398.0
172.5°	394.9	394.1
175°	393.0	393.0
177.5°	391.4	390.4
180°	390.4	390.4



TEST NUMBER: P936326  
 CATALOG NUMBER: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-12-3000K

**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	5.96	7.11	6.70	7.88	8.81	19.15	20.30	19.89	21.07	22.00
	3H	6.68	7.73	7.44	8.50	9.46	21.02	22.06	21.77	22.84	23.79
	4H	7.00	7.98	7.77	8.77	9.74	21.68	22.66	22.45	23.45	24.42
	6H	7.26	8.17	8.05	8.97	9.95	22.13	23.04	22.91	23.83	24.82
	8H	7.34	8.21	8.13	9.02	10.01	22.26	23.13	23.05	23.94	24.93
	12H	7.36	8.19	8.17	9.00	10.02	22.34	23.17	23.14	23.98	24.99
4H	2H	13.22	14.20	13.99	14.99	15.96	19.46	20.44	20.23	21.23	22.20
	3H	14.81	15.64	15.60	16.46	17.44	21.53	22.36	22.32	23.18	24.17
	4H	14.92	15.67	15.72	16.49	17.50	22.32	23.07	23.12	23.89	24.91
	6H	14.94	15.60	15.76	16.44	17.46	22.88	23.53	23.70	24.38	25.40
	8H	14.93	15.54	15.75	16.38	17.42	23.05	23.66	23.88	24.51	25.54
	12H	14.90	15.45	15.75	16.32	17.35	23.16	23.72	24.01	24.58	25.62
8H	4H	16.39	17.00	17.21	17.84	18.88	22.40	23.02	23.23	23.86	24.89
	6H	16.64	17.15	17.50	18.04	19.07	23.05	23.56	23.90	24.44	25.48
	8H	16.67	17.12	17.53	18.00	19.05	23.28	23.73	24.14	24.61	25.66
	12H	16.65	17.05	17.52	17.92	19.02	23.44	23.84	24.31	24.71	25.81
12H	4H	16.55	17.10	17.39	17.96	19.00	22.37	22.92	23.22	23.79	24.82
	6H	16.91	17.36	17.77	18.24	19.29	23.04	23.49	23.90	24.37	25.42
	8H	16.99	17.39	17.86	18.26	19.37	23.28	23.68	24.15	24.56	25.66