

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: P937893

Luminaire Tested: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937893
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

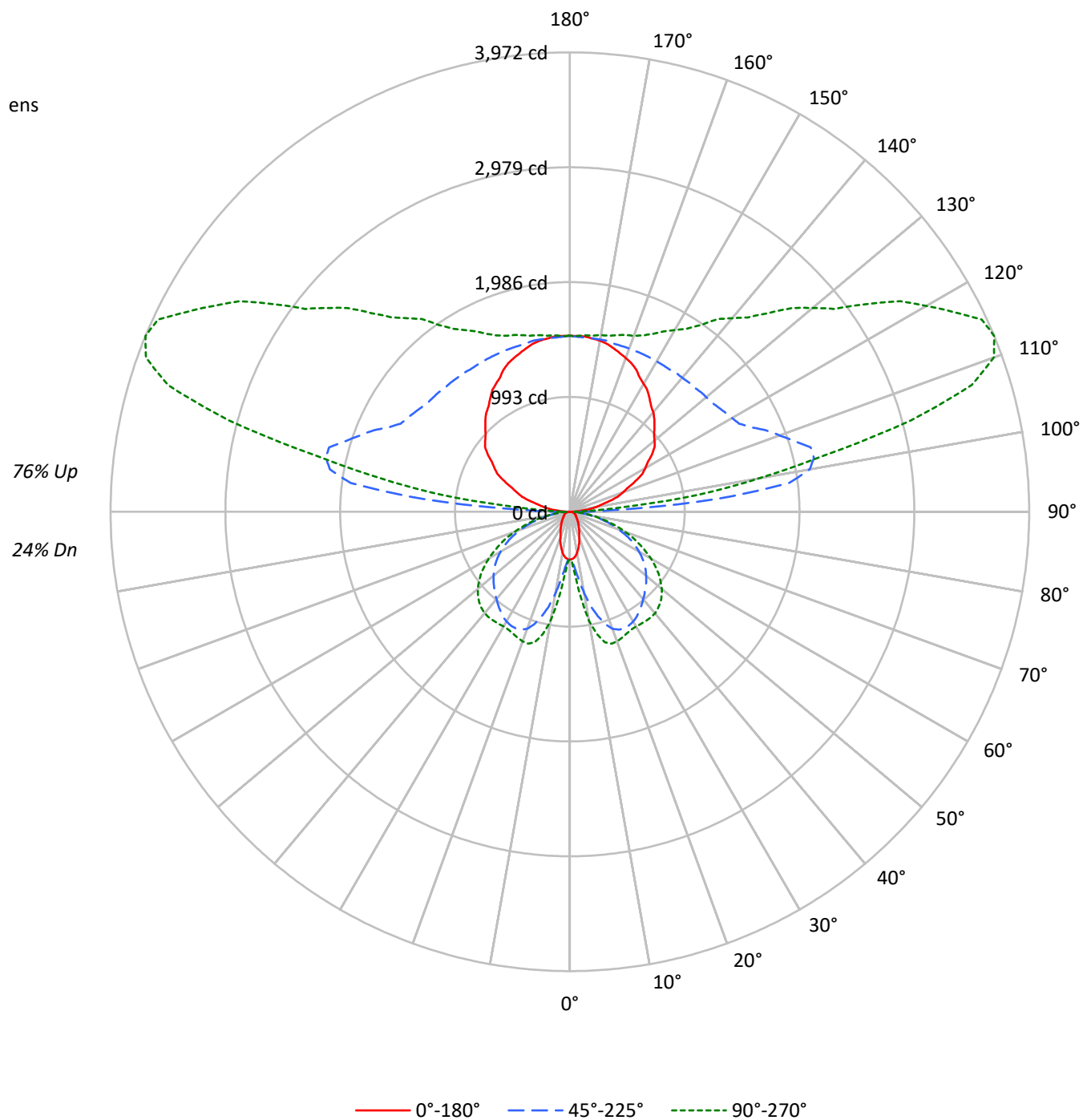
Lumens per Lamp: N/A
Luminaire Lumens: 13049.8 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 95.2
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: P937893

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-8-3000K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1908	1908	1908
5°	1864	2205	2565
10°	1691	3215	4252
15°	1437	4200	5135
20°	1170	4867	5233
25°	976	5094	5127
30°	823	5126	5117
35°	728	5041	5249
40°	634	4930	5386
45°	574	4849	5407
50°	526	4776	5318
55°	505	4669	5082
60°	517	4465	4710
65°	538	4152	4199
70°	573	3622	3547
75°	635	2953	2768
80°	694	2048	1865
85°	615	1087	954

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5407 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	0.4
10°-20°	235.8	1.8
20°-30°	412.5	3.2
30°-40°	530.9	4.1
40°-50°	593.1	4.5
50°-60°	568.0	4.4
60°-70°	450.2	3.4
70°-80°	264.7	2.0
80°-90°	79.3	0.6
90°-100°	741.6	5.7
100°-110°	1949.6	14.9
110°-120°	2021.5	15.5
120°-130°	1621.5	12.4
130°-140°	1272.3	9.7
140°-150°	976.6	7.5
150°-160°	703.3	5.4
160°-170°	430.3	3.3
170°-180°	145.4	1.1
0°-30°	701.5	5.4
0°-40°	1232.4	9.4
0°-60°	2393.5	18.3
0°-90°	3187.7	24.4
90°-120°	4712.7	36.1
90°-150°	8583.1	65.8
90°-180°	9862.0	75.6
0°-180°	13049.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	411	411	411	411	411	
5°	401	430	484	548	567	37
15°	300	554	934	1132	1168	84
25°	192	628	1112	1161	1162	88
35°	130	600	1047	1107	1151	81
45°	89	479	926	1061	1108	69
55°	64	304	786	912	938	58
65°	50	161	583	656	665	50
75°	37	99	320	352	353	39
85°	13	30	79	87	89	14
90°	10	29	78	39	39	9
95°	98	384	1277	658	448	109
105°	351	532	2155	3272	3053	372
115°	624	758	1727	3444	3931	616
125°	868	973	1570	2654	3130	771
135°	1034	1138	1521	2142	2429	800
145°	1200	1276	1502	1828	1970	752
155°	1356	1394	1502	1649	1697	623
165°	1463	1482	1502	1561	1581	413
175°	1521	1521	1512	1532	1532	144
180°	1521	1521	1521	1521	1521	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3
2.5°	411.3	411.3	413.9	415.3	417.9	419.2	421.9	424.6	432.5	433.7	436.4
5°	400.7	406.0	423.2	429.8	448.3	473.5	484.0	501.2	537.0	547.5	554.1
7.5°	384.8	396.8	439.1	449.6	496.0	562.0	589.8	626.9	683.7	711.5	734.0
10°	359.7	384.8	460.3	485.4	560.7	661.2	712.9	764.4	850.3	888.7	903.3
12.5°	332.0	372.9	482.7	517.1	625.5	772.3	834.6	891.3	989.3	1040.8	1048.7
15°	300.2	355.7	503.8	554.1	694.3	864.9	933.7	1003.7	1095.1	1132.0	1141.3
17.5°	272.4	342.5	523.8	576.6	747.2	948.2	1018.3	1076.5	1150.6	1175.7	1182.3
20°	238.0	321.3	537.0	605.7	802.8	1009.1	1076.5	1121.5	1171.8	1187.6	1190.3
22.5°	212.9	298.9	544.9	616.2	839.8	1046.1	1102.9	1138.7	1173.0	1178.4	1179.7
25°	191.8	273.7	543.6	628.2	871.5	1068.6	1112.2	1138.7	1158.6	1161.2	1161.2
27.5°	172.0	246.0	538.3	630.8	895.4	1073.9	1108.3	1126.8	1136.1	1141.3	1141.3
30°	154.7	219.6	525.0	625.5	905.9	1068.6	1096.3	1105.6	1114.9	1122.9	1126.8
32.5°	141.5	194.4	505.2	615.0	907.2	1055.3	1075.2	1080.5	1093.7	1112.2	1118.8
35°	129.6	169.3	482.7	600.4	899.3	1034.2	1047.4	1052.8	1079.2	1107.0	1116.2
37.5°	117.7	150.8	453.7	575.3	887.4	1009.1	1018.3	1027.6	1068.6	1101.7	1112.2
40°	105.8	134.9	419.2	547.5	868.9	978.7	986.6	1001.2	1055.3	1093.7	1104.3
42.5°	96.5	121.7	382.2	518.4	845.1	944.3	956.2	977.3	1039.5	1080.5	1092.4
45°	88.6	108.5	342.5	478.7	814.6	908.6	925.8	954.8	1021.0	1060.6	1071.2
47.5°	80.7	99.2	301.5	437.8	781.6	872.9	895.4	928.4	995.9	1034.2	1043.5
50°	74.0	89.9	260.5	394.1	745.9	834.6	861.0	895.4	964.1	999.8	1011.7
52.5°	68.7	82.0	222.1	350.4	704.9	794.8	825.3	861.0	925.8	960.2	968.1
55°	63.5	75.4	189.1	304.2	662.6	752.5	785.5	820.0	883.5	912.5	917.9
57.5°	60.8	70.1	161.3	260.5	617.6	704.9	742.0	773.7	833.2	855.7	861.0
60°	56.9	66.2	140.2	223.5	568.7	659.9	691.7	723.4	773.7	792.2	796.2
62.5°	52.9	63.5	124.3	187.8	518.4	607.1	638.7	667.9	710.2	723.4	728.8
65°	50.3	60.8	112.4	161.3	466.9	551.5	583.2	608.4	642.8	656.0	658.6
67.5°	47.6	58.2	103.1	138.8	415.3	496.0	519.7	543.6	570.0	583.2	584.5
70°	43.7	55.5	95.2	123.0	362.4	432.5	452.3	477.4	498.6	505.2	509.2
72.5°	41.0	51.6	89.9	111.1	308.1	371.6	390.2	404.7	423.2	429.8	429.8
75°	37.1	46.2	84.6	99.2	252.6	304.2	320.1	334.5	349.1	351.8	347.9
77.5°	33.0	41.0	72.8	83.3	197.1	240.7	253.9	261.9	273.7	276.4	277.8
80°	27.8	35.7	56.9	64.8	142.9	177.2	186.5	193.1	203.7	203.7	206.3
82.5°	21.2	27.8	41.0	46.2	96.5	121.7	129.6	133.6	140.2	140.2	140.2
85°	13.2	17.2	26.4	30.4	58.2	74.0	79.4	80.7	86.0	87.3	87.3
87.5°	6.6	9.3	17.2	18.5	30.4	38.4	38.4	41.0	41.0	39.6	38.4
90°	10.3	18.4	26.5	28.6	45.0	66.8	77.6	68.9	51.7	38.7	38.7
92.5°	40.8	110.2	179.7	197.1	277.1	383.7	437.0	383.0	275.0	193.9	186.3
95°	98.0	225.1	352.2	383.9	681.7	1078.8	1277.3	1139.8	864.8	658.5	635.2
97.5°	169.5	281.6	393.7	421.7	918.3	1580.4	1911.4	1824.5	1650.7	1520.3	1475.8
100°	224.6	326.3	427.9	453.4	1004.3	1739.0	2106.4	2112.7	2125.4	2135.0	2082.0
102.5°	271.5	366.4	461.3	485.0	1043.9	1789.0	2161.5	2272.2	2493.7	2659.7	2614.4
105°	351.2	431.6	511.8	531.9	1073.1	1794.6	2155.4	2403.6	2900.0	3272.3	3248.0
107.5°	433.0	507.8	582.6	601.4	1078.5	1714.8	2032.8	2379.1	3071.6	3590.9	3596.8
110°	488.1	555.7	623.3	640.2	1070.4	1644.0	1930.8	2317.9	3092.0	3672.6	3698.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	542.2	606.6	671.1	687.1	1070.7	1582.1	1837.8	2234.0	3026.2	3620.5	3659.5
115°	623.8	683.3	742.7	757.5	1080.6	1511.2	1726.6	2108.2	2871.4	3443.9	3498.0
117.5°	704.5	758.5	812.5	826.0	1100.7	1466.9	1650.0	1994.4	2683.2	3199.9	3259.9
120°	751.4	802.3	853.1	865.8	1116.9	1451.9	1619.3	1934.0	2563.4	3035.5	3093.8
122.5°	797.4	848.7	899.9	912.7	1140.4	1444.0	1595.8	1879.2	2446.1	2871.1	2928.6
125°	867.9	914.6	961.4	973.0	1172.1	1437.6	1570.3	1811.1	2292.5	2653.6	2706.6
127.5°	925.1	972.3	1019.4	1031.3	1203.8	1433.8	1548.9	1755.6	2169.0	2479.0	2523.7
130°	955.6	1006.5	1057.3	1070.0	1226.9	1436.1	1540.7	1724.7	2092.8	2368.8	2410.1
132.5°	987.3	1038.2	1088.9	1101.7	1245.6	1437.6	1533.5	1698.3	2027.7	2274.8	2311.8
135°	1034.3	1080.6	1126.9	1138.4	1266.0	1436.2	1521.3	1659.2	1935.1	2142.1	2173.9
137.5°	1082.2	1128.1	1173.9	1185.4	1296.7	1445.1	1519.2	1635.9	1869.2	2044.1	2070.2
140°	1122.1	1164.3	1206.5	1217.0	1315.4	1446.6	1512.1	1612.9	1814.3	1965.5	1989.8
142.5°	1152.7	1191.8	1230.7	1240.5	1331.0	1451.8	1512.1	1600.6	1777.6	1910.3	1931.3
145°	1199.7	1233.7	1267.8	1276.3	1351.5	1451.8	1501.9	1574.2	1719.1	1827.6	1843.5
147.5°	1246.7	1279.8	1313.0	1321.2	1381.5	1461.7	1501.9	1558.9	1672.7	1758.2	1771.3
150°	1277.3	1307.2	1337.2	1344.7	1397.1	1467.0	1501.9	1550.0	1646.2	1718.4	1729.0
152.5°	1308.9	1331.6	1354.3	1360.0	1407.3	1470.3	1501.9	1543.0	1625.1	1686.8	1694.8
155°	1355.9	1372.7	1389.5	1393.7	1429.8	1477.8	1501.9	1534.6	1600.0	1649.0	1654.3
157.5°	1390.7	1406.9	1423.3	1427.3	1452.2	1485.3	1501.9	1527.3	1578.1	1616.3	1620.0
160°	1414.1	1426.8	1439.6	1442.7	1462.4	1488.8	1501.9	1523.7	1567.2	1599.9	1602.1
162.5°	1437.6	1447.1	1456.6	1459.0	1473.3	1492.3	1501.9	1520.2	1557.0	1584.6	1586.7
165°	1463.1	1471.8	1480.4	1482.5	1489.0	1497.5	1501.9	1515.1	1541.4	1561.1	1563.3
167.5°	1486.6	1490.6	1494.8	1495.8	1501.2	1508.5	1512.1	1520.7	1538.0	1550.9	1551.8
170°	1501.9	1506.0	1510.2	1511.1	1511.4	1511.9	1512.1	1520.7	1538.0	1550.9	1550.9
172.5°	1510.1	1510.9	1511.9	1512.1	1512.1	1512.1	1512.1	1518.9	1532.5	1542.8	1542.0
175°	1521.3	1521.3	1521.3	1521.3	1518.2	1514.2	1512.1	1516.5	1525.0	1531.6	1531.6
177.5°	1521.3	1521.3	1521.3	1521.3	1518.9	1515.8	1514.2	1517.6	1524.4	1529.5	1528.6
180°	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3	1521.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	411.3	411.3
2.5°	439.1	436.4
5°	564.7	567.3
7.5°	760.4	759.1
10°	945.6	957.5
12.5°	1080.5	1083.1
15°	1162.5	1167.8
17.5°	1194.2	1195.5
20°	1195.5	1192.9
22.5°	1181.0	1178.4
25°	1163.8	1162.5
27.5°	1147.9	1149.3
30°	1141.3	1145.3
32.5°	1141.3	1147.9
35°	1144.0	1150.6
37.5°	1142.7	1150.6
40°	1137.4	1146.6
42.5°	1122.9	1129.5
45°	1100.4	1108.3
47.5°	1071.2	1076.5
50°	1034.2	1039.5
52.5°	987.9	989.3
55°	932.4	937.7
57.5°	872.9	874.2
60°	806.7	810.7
62.5°	736.6	736.6
65°	662.6	665.3
67.5°	585.9	592.5
70°	507.9	509.2
72.5°	431.2	431.2
75°	351.8	353.1
77.5°	276.4	276.4
80°	205.0	206.3
82.5°	141.5	144.2
85°	88.6	88.6
87.5°	41.0	37.1
90°	38.7	38.7
92.5°	155.4	124.5
95°	541.7	448.2
97.5°	1298.0	1120.1
100°	1870.0	1658.2
102.5°	2432.9	2251.3
105°	3150.4	3052.9
107.5°	3620.4	3644.0
110°	3799.6	3901.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3815.6	3971.7
115°	3714.5	3930.9
117.5°	3499.9	3740.0
120°	3327.1	3560.2
122.5°	3158.7	3388.8
125°	2918.6	3130.5
127.5°	2702.5	2881.3
130°	2575.2	2740.4
132.5°	2459.8	2607.7
135°	2301.5	2429.0
137.5°	2174.5	2278.9
140°	2087.5	2185.0
142.5°	2015.2	2099.2
145°	1907.0	1970.5
147.5°	1824.0	1876.7
150°	1771.7	1814.3
152.5°	1727.0	1759.2
155°	1675.6	1696.9
157.5°	1635.0	1650.0
160°	1610.6	1619.3
162.5°	1594.9	1603.0
165°	1571.9	1580.6
167.5°	1555.4	1559.1
170°	1550.9	1550.9
172.5°	1538.8	1535.6
175°	1531.6	1531.6
177.5°	1524.9	1521.3
180°	1521.3	1521.3

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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	0.23	0.92	1.38	2.06	3.65	13.42	14.10	14.56	15.24	16.83
	3H	0.93	1.54	2.08	2.69	4.30	15.24	15.86	16.39	17.00	18.61
	4H	1.22	1.80	2.38	2.95	4.56	15.88	16.46	17.04	17.61	19.22
	6H	1.46	2.00	2.63	3.14	4.77	16.30	16.84	17.47	17.99	19.61
	8H	1.52	2.03	2.69	3.20	4.81	16.41	16.93	17.59	18.09	19.71
	12H	1.53	2.02	2.71	3.17	4.81	16.48	16.96	17.65	18.12	19.76
4H	2H	7.43	8.01	8.60	9.16	10.77	13.67	14.25	14.84	15.40	17.01
	3H	8.98	9.47	10.15	10.64	12.27	15.70	16.19	16.87	17.36	18.98
	4H	9.07	9.52	10.24	10.68	12.32	16.46	16.91	17.63	18.07	19.71
	6H	9.07	9.45	10.25	10.64	12.27	16.98	17.37	18.17	18.55	20.19
	8H	9.04	9.40	10.22	10.57	12.22	17.14	17.50	18.32	18.68	20.33
	12H	8.99	9.31	10.18	10.50	12.15	17.23	17.55	18.42	18.74	20.39
8H	4H	10.50	10.86	11.68	12.03	13.68	16.50	16.86	17.68	18.03	19.68
	6H	10.73	11.03	11.93	12.24	13.89	17.12	17.42	18.32	18.63	20.28
	8H	10.75	11.01	11.95	12.20	13.87	17.34	17.60	18.54	18.79	20.46
	12H	10.71	10.93	11.92	12.12	13.82	17.47	17.70	18.68	18.89	20.59
12H	4H	10.63	10.96	11.83	12.14	13.80	16.44	16.77	17.64	17.96	19.61
	6H	10.99	11.25	12.19	12.44	14.11	17.10	17.36	18.31	18.55	20.22
	8H	11.05	11.28	12.26	12.47	14.16	17.32	17.55	18.53	18.74	20.44