

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: P937865

Luminaire Tested: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937865
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-93050-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

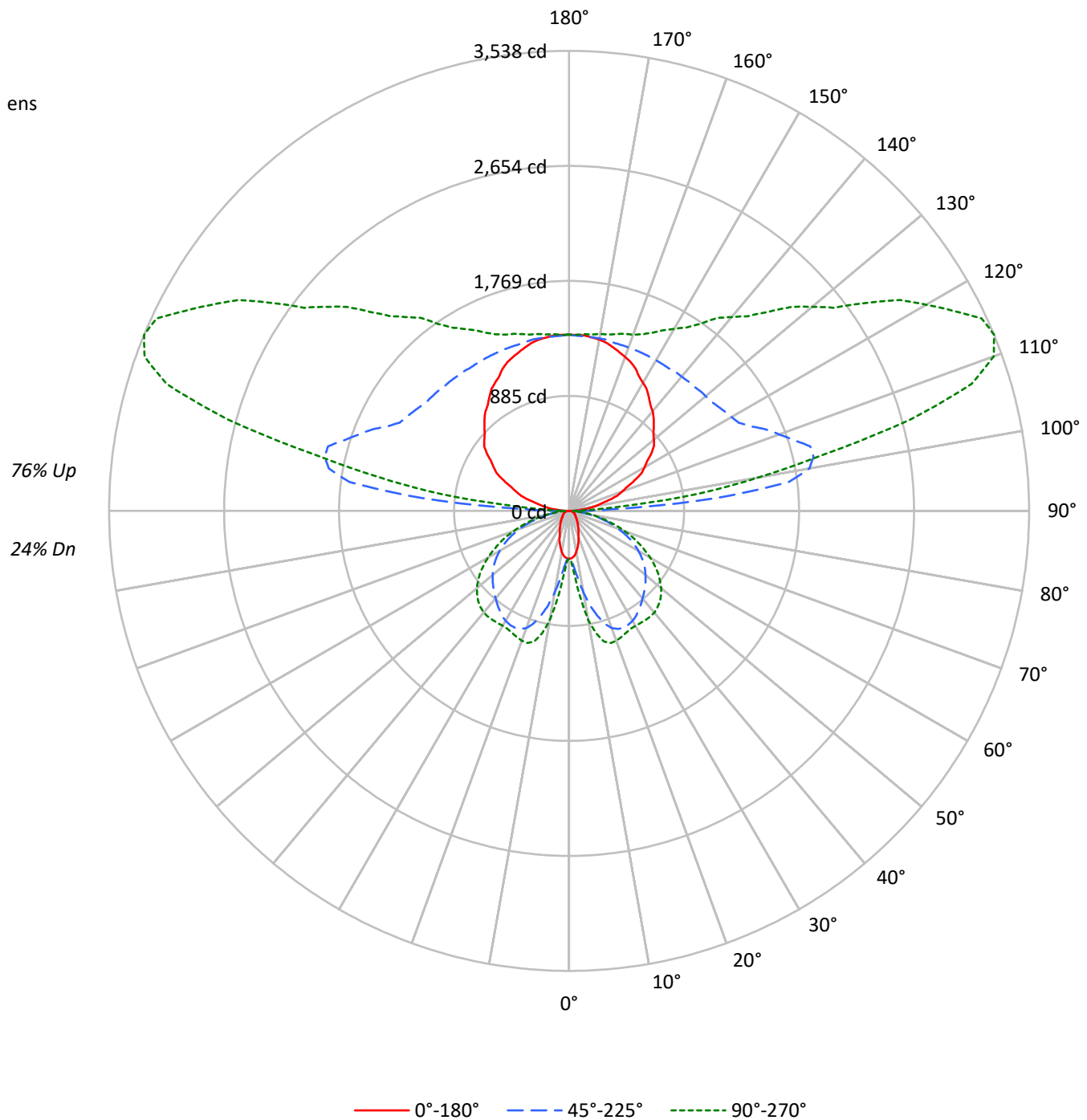
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11624.3 lumens
Efficiency: N/A
Efficacy: 122.1 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 (A_{in}): 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: P937865
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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	0
RCR																					
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1699	1699	1699
5°	1660	1965	2285
10°	1506	2864	3788
15°	1280	3742	4574
20°	1042	4336	4661
25°	869	4537	4567
30°	733	4566	4558
35°	648	4490	4676
40°	565	4391	4798
45°	512	4319	4817
50°	469	4254	4737
55°	450	4159	4527
60°	460	3977	4195
65°	479	3699	3740
70°	510	3226	3160
75°	565	2630	2465
80°	619	1824	1661
85°	550	968	851

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	0.4
10°-20°	210.0	1.8
20°-30°	367.4	3.2
30°-40°	472.9	4.1
40°-50°	528.3	4.5
50°-60°	506.0	4.4
60°-70°	401.0	3.4
70°-80°	235.8	2.0
80°-90°	70.7	0.6
90°-100°	660.6	5.7
100°-110°	1736.7	14.9
110°-120°	1800.7	15.5
120°-130°	1444.4	12.4
130°-140°	1133.3	9.7
140°-150°	869.9	7.5
150°-160°	626.5	5.4
160°-170°	383.3	3.3
170°-180°	129.5	1.1
0°-30°	624.8	5.4
0°-40°	1097.8	9.4
0°-60°	2132.0	18.3
0°-90°	2839.5	24.4
90°-120°	4198.0	36.1
90°-150°	7645.6	65.8
90°-180°	8785.0	75.6
0°-180°	11624.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	366	366	366	366	366	
5°	357	383	431	488	505	33
15°	267	494	832	1008	1040	74
25°	171	560	991	1034	1036	79
35°	115	535	933	986	1025	72
45°	79	426	825	945	987	61
55°	57	271	700	813	835	52
65°	45	144	520	584	593	44
75°	33	88	285	313	314	35
85°	12	27	71	78	79	13
90°	9	26	69	34	34	8
95°	87	342	1138	587	399	97
105°	313	474	1920	2915	2719	332
115°	556	675	1538	3068	3502	549
125°	773	867	1399	2364	2788	686
135°	921	1014	1355	1908	2164	713
145°	1069	1137	1338	1628	1755	669
155°	1208	1242	1338	1469	1512	555
165°	1303	1321	1338	1391	1408	368
175°	1355	1355	1347	1364	1364	129
180°	1355	1355	1355	1355	1355	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3
2.5°	366.3	366.3	368.7	369.9	372.2	373.5	375.8	378.2	385.2	386.4	388.7
5°	356.9	361.7	377.0	382.9	399.4	421.8	431.2	446.4	478.3	487.7	493.6
7.5°	342.8	353.4	391.1	400.5	441.8	500.6	525.4	558.4	609.0	633.8	653.8
10°	320.4	342.8	410.0	432.4	499.5	589.0	635.0	680.9	757.4	791.6	804.6
12.5°	295.7	332.2	430.0	460.6	557.2	688.0	743.4	794.0	881.2	927.1	934.2
15°	267.4	316.9	448.8	493.6	618.5	770.4	831.8	894.1	975.4	1008.4	1016.6
17.5°	242.7	305.1	466.6	513.6	665.6	844.7	907.1	958.9	1024.9	1047.3	1053.2
20°	212.0	286.2	478.3	539.5	715.1	898.9	958.9	999.0	1043.8	1057.9	1060.3
22.5°	189.6	266.2	485.3	548.9	748.0	931.9	982.5	1014.3	1044.9	1049.7	1050.8
25°	170.8	243.8	484.2	559.6	776.3	951.9	990.7	1014.3	1032.0	1034.4	1034.4
27.5°	153.2	219.1	479.5	561.9	797.6	956.6	987.2	1003.7	1012.0	1016.6	1016.6
30°	137.8	195.6	467.7	557.2	807.0	951.9	976.6	984.8	993.1	1000.2	1003.7
32.5°	126.0	173.2	450.0	547.8	808.1	940.0	957.8	962.4	974.2	990.7	996.6
35°	115.4	150.8	430.0	534.8	801.1	921.2	933.0	937.8	961.3	986.1	994.2
37.5°	104.9	134.3	404.1	512.5	790.5	898.9	907.1	915.4	951.9	981.3	990.7
40°	94.2	120.2	373.5	487.7	774.0	871.8	878.8	891.8	940.0	974.2	983.7
42.5°	86.0	108.4	340.4	461.8	752.8	841.1	851.8	870.6	926.0	962.4	973.1
45°	79.0	96.6	305.1	426.4	725.7	809.4	824.6	850.5	909.5	944.8	954.2
47.5°	71.8	88.4	268.6	390.0	696.2	777.6	797.6	827.0	887.1	921.2	929.5
50°	66.0	80.1	232.0	351.1	664.4	743.4	766.9	797.6	858.8	890.6	901.2
52.5°	61.2	73.1	197.9	312.1	627.9	708.0	735.1	766.9	824.6	855.3	862.3
55°	56.6	67.2	168.5	271.0	590.2	670.3	699.7	730.4	787.0	812.9	817.6
57.5°	54.2	62.4	143.7	232.0	550.2	627.9	660.9	689.2	742.2	762.2	766.9
60°	50.7	58.9	124.9	199.1	506.6	587.8	616.1	644.4	689.2	705.6	709.2
62.5°	47.2	56.6	110.8	167.3	461.8	540.8	569.0	595.0	632.6	644.4	649.2
65°	44.8	54.2	100.1	143.7	415.9	491.2	519.5	541.9	572.6	584.3	586.7
67.5°	42.4	51.8	91.9	123.7	369.9	441.8	463.0	484.2	507.7	519.5	520.7
70°	38.9	49.4	84.8	109.5	322.8	385.2	402.9	425.3	444.2	450.0	453.6
72.5°	36.5	45.9	80.1	99.0	274.5	331.0	347.5	360.5	377.0	382.9	382.9
75°	33.0	41.2	75.4	88.4	225.0	271.0	285.1	298.0	311.0	313.4	309.9
77.5°	29.4	36.5	64.8	74.2	175.6	214.4	226.2	233.3	243.8	246.2	247.4
80°	24.8	31.8	50.7	57.7	127.3	157.8	166.1	172.0	181.5	181.5	183.7
82.5°	18.9	24.8	36.5	41.2	86.0	108.4	115.4	119.0	124.9	124.9	124.9
85°	11.8	15.3	23.5	27.1	51.8	66.0	70.7	71.8	76.6	77.7	77.7
87.5°	5.9	8.3	15.3	16.5	27.1	34.2	34.2	36.5	36.5	35.3	34.2
90°	9.1	16.4	23.6	25.5	40.1	59.5	69.1	61.4	46.0	34.5	34.5
92.5°	36.4	98.2	160.1	175.6	246.8	341.7	389.3	341.1	245.0	172.8	165.9
95°	87.3	200.5	313.7	342.0	607.3	960.9	1137.8	1015.3	770.4	586.6	565.8
97.5°	151.0	250.8	350.7	375.6	818.0	1407.7	1702.6	1625.2	1470.4	1354.3	1314.6
100°	200.1	290.6	381.2	403.8	894.6	1549.1	1876.3	1881.9	1893.3	1901.8	1854.6
102.5°	241.9	326.4	410.9	432.0	929.9	1593.6	1925.4	2024.0	2221.3	2369.2	2328.8
105°	312.9	384.4	455.9	473.8	955.9	1598.6	1920.0	2141.0	2583.3	2914.9	2893.2
107.5°	385.7	452.3	519.0	535.7	960.7	1527.5	1810.8	2119.3	2736.1	3198.7	3204.0
110°	434.8	495.0	555.3	570.3	953.5	1464.4	1719.9	2064.7	2754.3	3271.4	3294.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	483.0	540.3	597.8	612.1	953.7	1409.3	1637.1	1990.0	2695.7	3225.0	3259.8
115°	555.7	608.7	661.5	674.8	962.5	1346.2	1538.0	1877.9	2557.8	3067.7	3115.9
117.5°	627.5	675.7	723.7	735.8	980.4	1306.6	1469.7	1776.5	2390.1	2850.4	2903.8
120°	669.4	714.7	759.9	771.2	994.9	1293.3	1442.4	1722.8	2283.4	2703.9	2755.8
122.5°	710.3	756.0	801.6	813.0	1015.8	1286.3	1421.5	1674.0	2178.9	2557.5	2608.7
125°	773.1	814.7	856.3	866.7	1044.0	1280.6	1398.8	1613.3	2042.1	2363.8	2410.9
127.5°	824.0	866.1	908.1	918.6	1072.3	1277.2	1379.7	1563.8	1932.1	2208.2	2248.0
130°	851.2	896.6	941.8	953.1	1092.9	1279.2	1372.4	1536.3	1864.2	2110.0	2146.8
132.5°	879.4	924.8	970.0	981.3	1109.6	1280.6	1366.0	1512.8	1806.2	2026.3	2059.3
135°	921.3	962.5	1003.8	1014.1	1127.7	1279.3	1355.1	1478.0	1723.8	1908.1	1936.5
137.5°	964.0	1004.9	1045.7	1055.9	1155.1	1287.2	1353.3	1457.2	1665.0	1820.8	1844.1
140°	999.5	1037.1	1074.7	1084.1	1171.7	1288.6	1347.0	1436.7	1616.2	1750.8	1772.5
142.5°	1026.8	1061.6	1096.3	1105.0	1185.6	1293.2	1347.0	1425.7	1583.4	1701.6	1720.3
145°	1068.6	1098.9	1129.3	1136.9	1203.9	1293.2	1337.8	1402.3	1531.3	1628.0	1642.2
147.5°	1110.5	1140.0	1169.5	1176.9	1230.6	1302.1	1337.8	1388.6	1490.0	1566.2	1577.9
150°	1137.8	1164.5	1191.2	1197.8	1244.5	1306.7	1337.8	1380.7	1466.4	1530.7	1540.2
152.5°	1165.9	1186.1	1206.3	1211.4	1253.6	1309.7	1337.8	1374.5	1447.6	1502.5	1509.7
155°	1207.8	1222.8	1237.7	1241.5	1273.6	1316.4	1337.8	1367.0	1425.2	1468.9	1473.6
157.5°	1238.8	1253.2	1267.8	1271.4	1293.6	1323.1	1337.8	1360.5	1405.7	1439.7	1443.0
160°	1259.7	1271.0	1282.3	1285.1	1302.7	1326.1	1337.8	1357.2	1396.1	1425.1	1427.1
162.5°	1280.6	1289.0	1297.5	1299.6	1312.4	1329.3	1337.8	1354.2	1386.9	1411.5	1413.4
165°	1303.3	1311.0	1318.7	1320.6	1326.3	1334.0	1337.8	1349.6	1373.0	1390.6	1392.5
167.5°	1324.2	1327.8	1331.5	1332.4	1337.2	1343.7	1347.0	1354.6	1370.0	1381.5	1382.3
170°	1337.8	1341.5	1345.2	1346.1	1346.3	1346.8	1347.0	1354.6	1370.0	1381.5	1381.5
172.5°	1345.1	1345.9	1346.8	1347.0	1347.0	1347.0	1347.0	1353.0	1365.1	1374.3	1373.6
175°	1355.1	1355.1	1355.1	1355.1	1352.4	1348.8	1347.0	1350.8	1358.5	1364.3	1364.3
177.5°	1355.1	1355.1	1355.1	1355.1	1353.0	1350.2	1348.8	1351.8	1357.9	1362.4	1361.6
180°	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1	1355.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	366.3	366.3
2.5°	391.1	388.7
5°	503.0	505.4
7.5°	677.3	676.2
10°	842.3	852.9
12.5°	962.4	964.8
15°	1035.5	1040.3
17.5°	1063.8	1064.9
20°	1064.9	1062.6
22.5°	1052.0	1049.7
25°	1036.7	1035.5
27.5°	1022.5	1023.7
30°	1016.6	1020.2
32.5°	1016.6	1022.5
35°	1019.0	1024.9
37.5°	1017.9	1024.9
40°	1013.1	1021.4
42.5°	1000.2	1006.1
45°	980.2	987.2
47.5°	954.2	958.9
50°	921.2	926.0
52.5°	880.0	881.2
55°	830.5	835.3
57.5°	777.6	778.7
60°	718.6	722.1
62.5°	656.2	656.2
65°	590.2	592.6
67.5°	521.9	527.8
70°	452.4	453.6
72.5°	384.1	384.1
75°	313.4	314.5
77.5°	246.2	246.2
80°	182.6	183.7
82.5°	126.0	128.4
85°	79.0	79.0
87.5°	36.5	33.0
90°	34.5	34.5
92.5°	138.4	110.9
95°	482.5	399.3
97.5°	1156.2	997.7
100°	1665.8	1477.0
102.5°	2167.1	2005.4
105°	2806.3	2719.4
107.5°	3224.9	3245.9
110°	3384.6	3475.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3398.8	3537.9
115°	3308.7	3501.5
117.5°	3117.6	3331.5
120°	2963.7	3171.4
122.5°	2813.7	3018.6
125°	2599.8	2788.5
127.5°	2407.3	2566.6
130°	2293.9	2441.1
132.5°	2191.1	2322.8
135°	2050.1	2163.7
137.5°	1937.0	2030.0
140°	1859.5	1946.3
142.5°	1795.1	1869.9
145°	1698.7	1755.3
147.5°	1624.8	1671.7
150°	1578.2	1616.2
152.5°	1538.3	1567.1
155°	1492.6	1511.6
157.5°	1456.4	1469.7
160°	1434.7	1442.4
162.5°	1420.7	1427.9
165°	1400.2	1407.9
167.5°	1385.5	1388.8
170°	1381.5	1381.5
172.5°	1370.7	1367.9
175°	1364.3	1364.3
177.5°	1358.4	1355.1
180°	1355.1	1355.1



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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	0.00	0.52	0.98	1.66	3.25	13.01	13.70	14.16	14.84	16.43
	3H	0.52	1.14	1.68	2.28	3.89	14.84	15.45	15.99	16.60	18.21
	4H	0.81	1.40	1.98	2.54	4.16	15.48	16.06	16.64	17.21	18.82
	6H	1.05	1.59	2.22	2.74	4.37	15.90	16.44	17.07	17.58	19.21
	8H	1.12	1.63	2.29	2.79	4.41	16.01	16.53	17.18	17.69	19.30
	12H	1.13	1.62	2.31	2.77	4.41	16.07	16.56	17.25	17.72	19.36
4H	2H	7.03	7.61	8.20	8.76	10.37	13.27	13.85	14.43	15.00	16.61
	3H	8.58	9.07	9.75	10.24	11.86	15.29	15.78	16.47	16.95	18.58
	4H	8.67	9.12	9.84	10.28	11.92	16.05	16.50	17.23	17.66	19.31
	6H	8.67	9.05	9.85	10.23	11.87	16.58	16.97	17.76	18.15	19.78
	8H	8.64	9.00	9.82	10.17	11.82	16.74	17.10	17.92	18.27	19.92
	12H	8.59	8.91	9.78	10.10	11.75	16.82	17.15	18.02	18.34	19.99
8H	4H	10.10	10.46	11.28	11.63	13.28	16.10	16.46	17.28	17.63	19.28
	6H	10.33	10.63	11.53	11.84	13.49	16.72	17.02	17.92	18.23	19.88
	8H	10.34	10.60	11.55	11.80	13.46	16.94	17.20	18.14	18.39	20.06
	12H	10.30	10.53	11.51	11.72	13.42	17.07	17.30	18.28	18.49	20.19
12H	4H	10.23	10.56	11.43	11.74	13.40	16.04	16.37	17.24	17.55	19.21
	6H	10.59	10.85	11.79	12.04	13.71	16.70	16.96	17.91	18.15	19.82
	8H	10.65	10.87	11.86	12.06	13.76	16.92	17.15	18.13	18.34	20.04