

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: P937845

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937845
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-92765-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

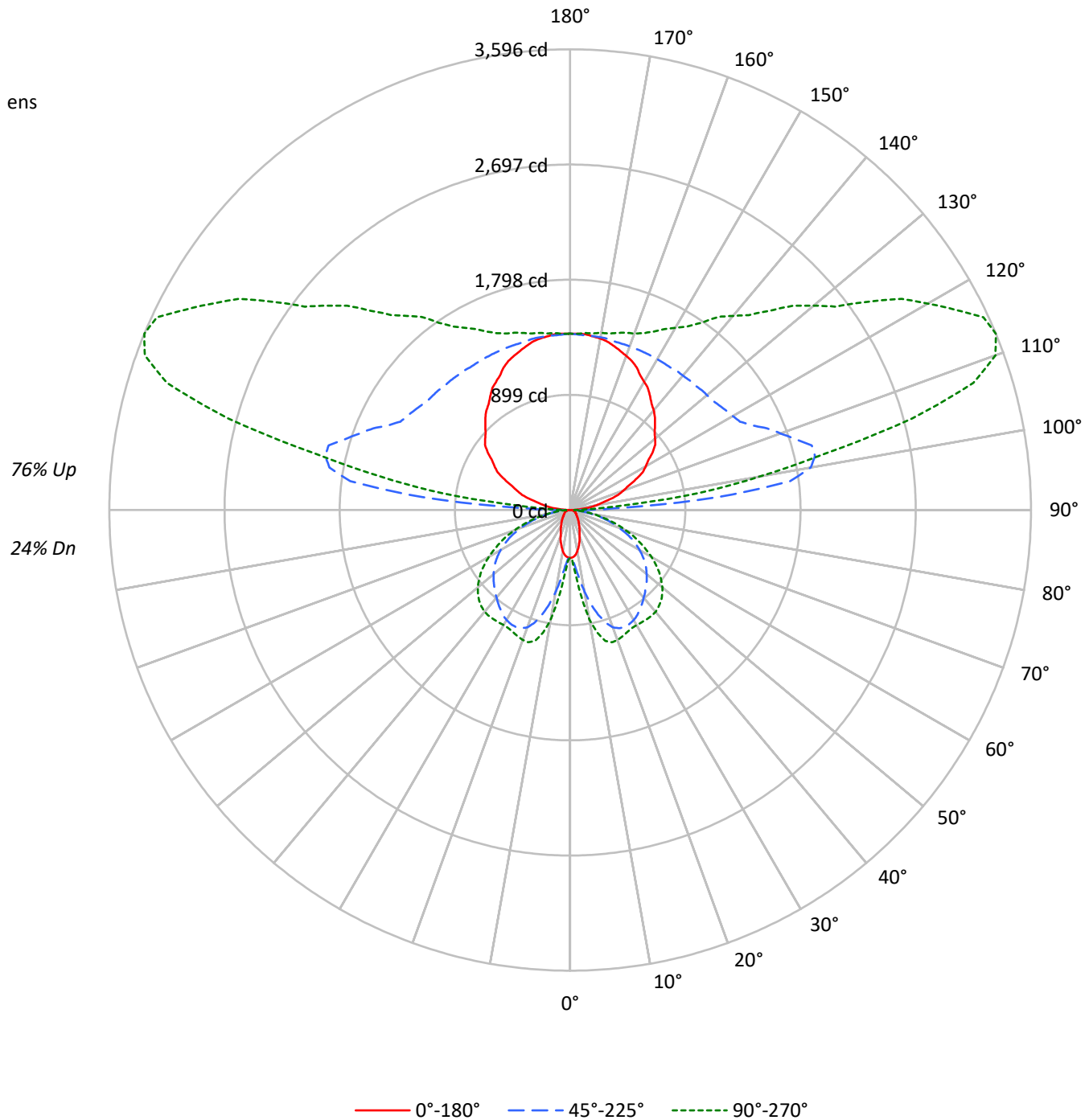
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11813.8 lumens
Efficiency: N/A
Efficacy: 124.1 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

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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°	1727	1727	1727
5°	1688	1997	2322
10°	1531	2911	3850
15°	1301	3803	4649
20°	1059	4407	4737
25°	884	4611	4641
30°	745	4640	4633
35°	659	4563	4752
40°	574	4463	4876
45°	520	4390	4895
50°	477	4324	4814
55°	457	4227	4601
60°	468	4042	4264
65°	486	3759	3801
70°	518	3278	3211
75°	575	2673	2505
80°	629	1854	1688
85°	559	984	864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4895 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.2	0.4
10°-20°	213.5	1.8
20°-30°	373.4	3.2
30°-40°	480.7	4.1
40°-50°	536.9	4.5
50°-60°	514.2	4.4
60°-70°	407.5	3.4
70°-80°	239.6	2.0
80°-90°	71.8	0.6
90°-100°	671.3	5.7
100°-110°	1765.0	14.9
110°-120°	1830.1	15.5
120°-130°	1468.0	12.4
130°-140°	1151.8	9.7
140°-150°	884.1	7.5
150°-160°	636.7	5.4
160°-170°	389.6	3.3
170°-180°	131.6	1.1
0°-30°	635.0	5.4
0°-40°	1115.7	9.4
0°-60°	2166.8	18.3
0°-90°	2885.7	24.4
90°-120°	4266.4	36.1
90°-150°	7770.2	65.8
90°-180°	8928.0	75.6
0°-180°	11813.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	363	389	438	496	514	33
15°	272	502	845	1025	1057	76
25°	174	569	1007	1051	1052	80
35°	117	544	948	1002	1042	73
45°	80	433	838	960	1003	62
55°	58	275	711	826	849	52
65°	46	146	528	594	602	45
75°	34	90	290	318	320	35
85°	12	28	72	79	80	13
90°	9	26	70	35	35	8
95°	89	348	1156	596	406	99
105°	318	482	1951	2962	2764	337
115°	565	686	1563	3118	3559	558
125°	786	881	1422	2402	2834	698
135°	936	1031	1377	1939	2199	724
145°	1086	1155	1360	1655	1784	680
155°	1228	1262	1360	1493	1536	564
165°	1325	1342	1360	1413	1431	374
175°	1377	1377	1369	1386	1386	131
180°	1377	1377	1377	1377	1377	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3
2.5°	372.3	372.3	374.7	376.0	378.3	379.5	382.0	384.4	391.5	392.7	395.1
5°	362.8	367.6	383.1	389.1	405.9	428.6	438.2	453.7	486.1	495.7	501.7
7.5°	348.4	359.2	397.5	407.0	449.0	508.8	534.0	567.5	618.9	644.1	664.5
10°	325.6	348.4	416.7	439.4	507.6	598.6	645.4	692.0	769.8	804.5	817.7
12.5°	300.5	337.6	437.0	468.1	566.3	699.2	755.5	806.9	895.6	942.2	949.4
15°	271.8	322.1	456.1	501.7	628.6	783.0	845.3	908.7	991.3	1024.8	1033.2
17.5°	246.6	310.1	474.2	522.0	676.4	858.4	921.9	974.6	1041.6	1064.4	1070.3
20°	215.5	290.9	486.1	548.3	726.8	913.5	974.6	1015.3	1060.8	1075.2	1077.6
22.5°	192.7	270.6	493.3	557.9	760.2	947.1	998.5	1030.9	1062.0	1066.8	1067.9
25°	173.6	247.8	492.1	568.7	789.0	967.4	1006.9	1030.9	1048.8	1051.2	1051.2
27.5°	155.7	222.7	487.3	571.1	810.6	972.2	1003.3	1020.1	1028.5	1033.2	1033.2
30°	140.1	198.8	475.3	566.3	820.1	967.4	992.5	1000.9	1009.3	1016.5	1020.1
32.5°	128.1	176.0	457.4	556.7	821.3	955.4	973.4	978.1	990.1	1006.9	1012.9
35°	117.3	153.3	437.0	543.5	814.2	936.3	948.2	953.1	977.0	1002.1	1010.4
37.5°	106.6	136.5	410.7	520.8	803.4	913.5	921.9	930.3	967.4	997.3	1006.9
40°	95.8	122.1	379.5	495.7	786.6	886.0	893.2	906.4	955.4	990.1	999.7
42.5°	87.4	110.1	346.0	469.3	765.1	854.9	865.7	884.8	941.1	978.1	988.9
45°	80.2	98.2	310.1	433.4	737.5	822.5	838.1	864.4	924.3	960.2	969.7
47.5°	73.0	89.8	273.0	396.3	707.6	790.2	810.6	840.5	901.5	936.3	944.7
50°	67.0	81.4	235.8	356.8	675.3	755.5	779.4	810.6	872.8	905.1	915.9
52.5°	62.2	74.3	201.1	317.2	638.1	719.5	747.1	779.4	838.1	869.2	876.4
55°	57.5	68.3	171.2	275.4	599.8	681.2	711.2	742.3	799.8	826.1	830.9
57.5°	55.1	63.5	146.0	235.8	559.1	638.1	671.7	700.4	754.3	774.6	779.4
60°	51.5	59.9	126.9	202.4	514.9	597.4	626.2	654.9	700.4	717.1	720.8
62.5°	47.9	57.5	112.6	170.0	469.3	549.6	578.2	604.7	643.0	654.9	659.7
65°	45.5	55.1	101.8	146.0	422.7	499.2	528.0	550.7	581.9	593.9	596.3
67.5°	43.1	52.7	93.4	125.7	376.0	449.0	470.5	492.1	516.0	528.0	529.1
70°	39.5	50.3	86.2	111.3	328.0	391.5	409.4	432.2	451.4	457.4	460.9
72.5°	37.1	46.7	81.4	100.6	278.9	336.4	353.2	366.3	383.1	389.1	389.1
75°	33.6	41.9	76.6	89.8	228.7	275.4	289.7	302.9	316.1	318.5	314.9
77.5°	29.9	37.1	65.9	75.4	178.4	217.9	229.8	237.1	247.8	250.2	251.5
80°	25.2	32.3	51.5	58.6	129.3	160.4	168.8	174.8	184.4	184.4	186.7
82.5°	19.2	25.2	37.1	41.9	87.4	110.1	117.3	121.0	126.9	126.9	126.9
85°	12.0	15.5	23.9	27.5	52.7	67.0	71.9	73.0	77.8	79.0	79.0
87.5°	6.0	8.4	15.5	16.8	27.5	34.7	34.7	37.1	37.1	35.9	34.7
90°	9.3	16.7	24.0	25.9	40.7	60.4	70.2	62.4	46.8	35.1	35.1
92.5°	37.0	99.8	162.7	178.4	250.8	347.3	395.6	346.7	249.0	175.6	168.6
95°	88.7	203.8	318.8	347.6	617.2	976.6	1156.3	1031.9	782.9	596.2	575.0
97.5°	153.4	254.9	356.4	381.8	831.3	1430.7	1730.3	1651.7	1494.3	1376.3	1336.1
100°	203.3	295.4	387.4	410.4	909.2	1574.3	1906.9	1912.6	1924.1	1932.8	1884.9
102.5°	245.8	331.7	417.6	439.1	945.0	1619.6	1956.8	2057.0	2257.5	2407.8	2366.8
105°	318.0	390.7	463.4	481.6	971.4	1624.7	1951.3	2175.9	2625.4	2962.4	2940.4
107.5°	391.9	459.7	527.4	544.4	976.3	1552.4	1840.3	2153.8	2780.7	3250.8	3256.2
110°	441.8	503.1	564.3	579.6	969.0	1488.3	1747.9	2098.4	2799.2	3324.7	3347.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	490.9	549.1	607.5	622.1	969.3	1432.3	1663.8	2022.4	2739.6	3277.6	3313.0
115°	564.8	618.6	672.3	685.8	978.2	1368.1	1563.1	1908.5	2599.5	3117.7	3166.7
117.5°	637.8	686.7	735.5	747.7	996.4	1328.0	1493.7	1805.5	2429.1	2896.8	2951.2
120°	680.3	726.3	772.3	783.8	1011.2	1314.4	1465.9	1750.9	2320.6	2748.0	2800.8
122.5°	721.9	768.3	814.7	826.3	1032.4	1307.2	1444.7	1701.2	2214.4	2599.2	2651.3
125°	785.7	828.0	870.3	880.8	1061.1	1301.4	1421.6	1639.6	2075.4	2402.3	2450.2
127.5°	837.5	880.2	922.9	933.6	1089.8	1298.0	1402.2	1589.3	1963.6	2244.2	2284.7
130°	865.1	911.2	957.2	968.7	1110.7	1300.1	1394.8	1561.4	1894.6	2144.4	2181.8
132.5°	893.8	939.8	985.8	997.3	1127.6	1301.4	1388.3	1537.4	1835.7	2059.4	2092.8
135°	936.4	978.2	1020.2	1030.6	1146.1	1300.2	1377.2	1502.1	1751.9	1939.2	1968.0
137.5°	979.7	1021.2	1062.8	1073.1	1173.9	1308.2	1375.3	1480.9	1692.1	1850.5	1874.1
140°	1015.8	1054.0	1092.2	1101.8	1190.8	1309.6	1368.9	1460.1	1642.5	1779.3	1801.4
142.5°	1043.6	1078.9	1114.2	1123.0	1204.9	1314.3	1368.9	1449.0	1609.2	1729.4	1748.4
145°	1086.1	1116.8	1147.7	1155.4	1223.5	1314.3	1359.6	1425.2	1556.3	1654.6	1668.9
147.5°	1128.6	1158.6	1188.6	1196.1	1250.6	1323.3	1359.6	1411.2	1514.3	1591.7	1603.6
150°	1156.3	1183.4	1210.6	1217.4	1264.8	1328.0	1359.6	1403.2	1490.3	1555.7	1565.3
152.5°	1185.0	1205.5	1226.0	1231.2	1274.0	1331.1	1359.6	1396.9	1471.2	1527.0	1534.3
155°	1227.5	1242.7	1257.9	1261.7	1294.4	1337.9	1359.6	1389.3	1448.5	1492.8	1497.6
157.5°	1259.0	1273.7	1288.5	1292.2	1314.7	1344.6	1359.6	1382.7	1428.6	1463.2	1466.6
160°	1280.2	1291.7	1303.2	1306.1	1323.9	1347.8	1359.6	1379.4	1418.8	1448.4	1450.3
162.5°	1301.4	1310.0	1318.7	1320.8	1333.8	1351.0	1359.6	1376.2	1409.5	1434.5	1436.4
165°	1324.6	1332.4	1340.2	1342.1	1347.9	1355.7	1359.6	1371.6	1395.4	1413.3	1415.2
167.5°	1345.8	1349.5	1353.2	1354.1	1359.0	1365.6	1368.9	1376.7	1392.3	1404.0	1404.8
170°	1359.6	1363.4	1367.1	1368.0	1368.3	1368.7	1368.9	1376.7	1392.3	1404.0	1404.0
172.5°	1367.0	1367.9	1368.7	1368.9	1368.9	1368.9	1368.9	1375.1	1387.4	1396.7	1396.0
175°	1377.2	1377.2	1377.2	1377.2	1374.5	1370.8	1368.9	1372.8	1380.6	1386.5	1386.5
177.5°	1377.2	1377.2	1377.2	1377.2	1375.1	1372.2	1370.8	1373.8	1380.0	1384.6	1383.8
180°	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2	1377.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	372.3	372.3
2.5°	397.5	395.1
5°	511.2	513.6
7.5°	688.4	687.2
10°	856.0	866.8
12.5°	978.1	980.5
15°	1052.4	1057.2
17.5°	1081.1	1082.3
20°	1082.3	1079.9
22.5°	1069.2	1066.8
25°	1053.6	1052.4
27.5°	1039.2	1040.4
30°	1033.2	1036.9
32.5°	1033.2	1039.2
35°	1035.6	1041.6
37.5°	1034.5	1041.6
40°	1029.6	1038.0
42.5°	1016.5	1022.5
45°	996.2	1003.3
47.5°	969.7	974.6
50°	936.3	941.1
52.5°	894.3	895.6
55°	844.1	848.9
57.5°	790.2	791.4
60°	730.3	733.9
62.5°	666.9	666.9
65°	599.8	602.3
67.5°	530.4	536.4
70°	459.8	460.9
72.5°	390.3	390.3
75°	318.5	319.6
77.5°	250.2	250.2
80°	185.6	186.7
82.5°	128.1	130.5
85°	80.2	80.2
87.5°	37.1	33.6
90°	35.1	35.1
92.5°	140.7	112.7
95°	490.4	405.8
97.5°	1175.0	1014.0
100°	1692.9	1501.1
102.5°	2202.5	2038.1
105°	2852.0	2763.7
107.5°	3277.5	3298.9
110°	3439.8	3531.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3454.3	3595.6
115°	3362.7	3558.6
117.5°	3168.4	3385.8
120°	3012.0	3223.1
122.5°	2859.6	3067.8
125°	2642.2	2834.0
127.5°	2446.6	2608.4
130°	2331.3	2480.9
132.5°	2226.8	2360.7
135°	2083.6	2199.0
137.5°	1968.6	2063.1
140°	1889.8	1978.0
142.5°	1824.3	1900.4
145°	1726.4	1783.9
147.5°	1651.3	1698.9
150°	1603.9	1642.5
152.5°	1563.4	1592.6
155°	1516.9	1536.2
157.5°	1480.1	1493.7
160°	1458.1	1465.9
162.5°	1443.8	1451.2
165°	1423.0	1430.9
167.5°	1408.1	1411.4
170°	1404.0	1404.0
172.5°	1393.0	1390.2
175°	1386.5	1386.5
177.5°	1380.5	1377.2
180°	1377.2	1377.2



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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	0.58	1.03	1.71	3.31	13.07	13.76	14.21	14.89	16.49
	3H	0.58	1.20	1.73	2.34	3.95	14.90	15.51	16.05	16.66	18.26
	4H	0.87	1.46	2.03	2.60	4.21	15.53	16.12	16.69	17.26	18.88
	6H	1.11	1.65	2.28	2.80	4.42	15.95	16.49	17.12	17.64	19.26
	8H	1.18	1.69	2.35	2.85	4.47	16.07	16.58	17.24	17.74	19.36
	12H	1.19	1.67	2.36	2.83	4.47	16.13	16.62	17.31	17.77	19.41
4H	2H	7.08	7.67	8.25	8.81	10.43	13.32	13.91	14.49	15.05	16.66
	3H	8.63	9.12	9.81	10.29	11.92	15.35	15.84	16.52	17.01	18.64
	4H	8.72	9.17	9.90	10.33	11.97	16.11	16.56	17.29	17.72	19.36
	6H	8.72	9.11	9.90	10.29	11.92	16.64	17.02	17.82	18.21	19.84
	8H	8.69	9.05	9.87	10.23	11.88	16.80	17.16	17.98	18.33	19.98
	12H	8.64	8.97	9.84	10.15	11.81	16.88	17.21	18.08	18.39	20.05
8H	4H	10.15	10.51	11.33	11.68	13.34	16.15	16.52	17.33	17.69	19.34
	6H	10.38	10.68	11.58	11.90	13.54	16.78	17.07	17.98	18.29	19.94
	8H	10.40	10.66	11.61	11.85	13.52	16.99	17.25	18.20	18.44	20.11
	12H	10.36	10.59	11.57	11.78	13.48	17.13	17.36	18.34	18.55	20.25
12H	4H	10.29	10.61	11.48	11.80	13.45	16.10	16.43	17.30	17.61	19.27
	6H	10.64	10.90	11.85	12.09	13.76	16.76	17.02	17.96	18.21	19.88
	8H	10.70	10.93	11.91	12.12	13.82	16.98	17.21	18.19	18.40	20.09