

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: P938062

Luminaire Tested: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938062
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

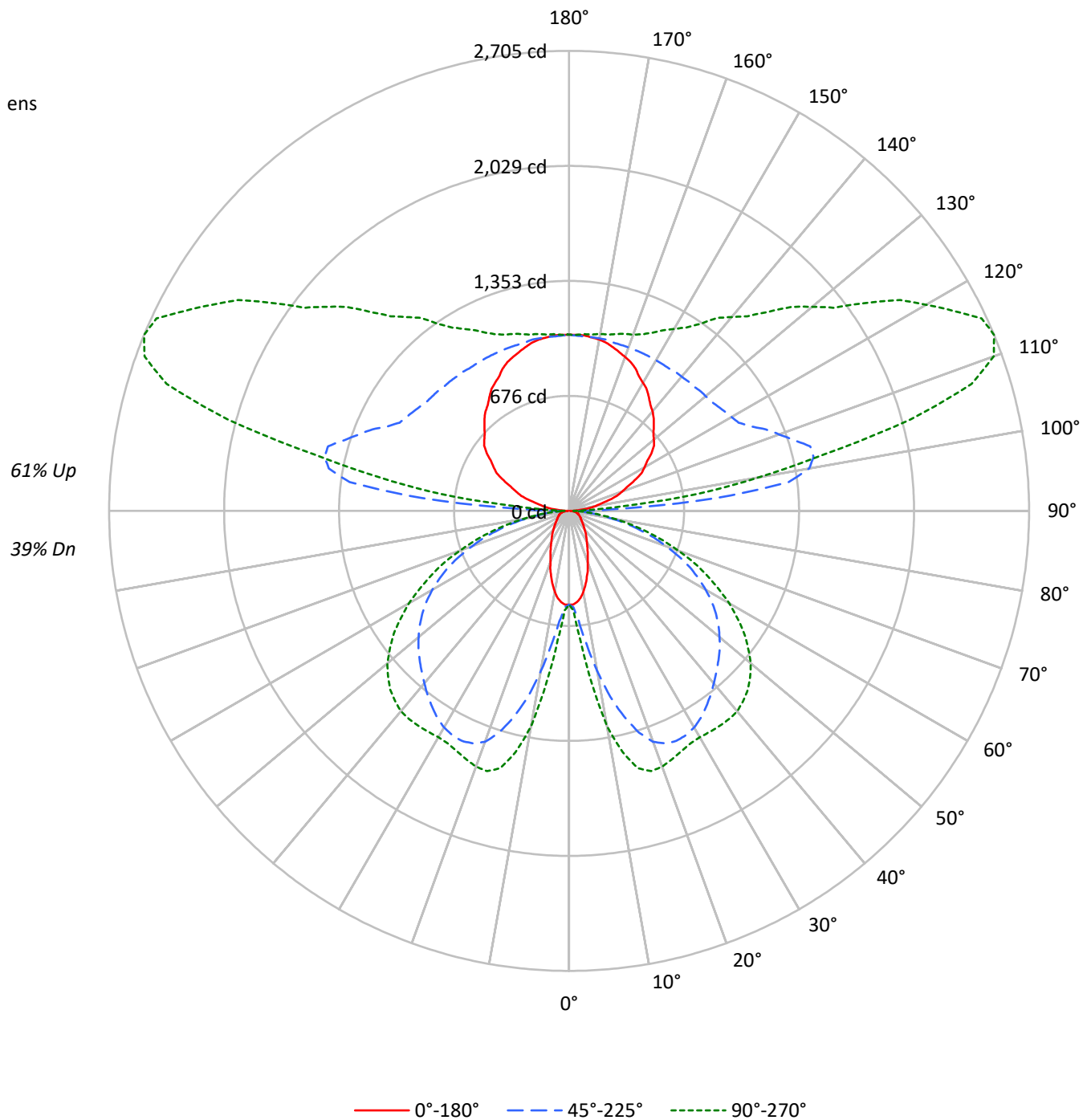
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10989.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 96.6
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: P938062
CATALOG NUMBER: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-6-3500K

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	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3414	3414	3414
5°	3334	3944	4588
10°	3023	5749	7607
15°	2568	7508	9185
20°	2090	8699	9361
25°	1743	9101	9171
30°	1469	9156	9153
35°	1298	9002	9391
40°	1130	8801	9635
45°	1023	8654	9672
50°	938	8521	9512
55°	896	8328	9091
60°	918	7958	8425
65°	953	7398	7510
70°	1013	6447	6344
75°	1118	5253	4951
80°	1211	3639	3336
85°	1055	1928	1708

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9672 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	0.6
10°-20°	316.4	2.9
20°-30°	553.4	5.0
30°-40°	712.3	6.5
40°-50°	795.7	7.2
50°-60°	762.1	6.9
60°-70°	603.9	5.5
70°-80°	355.1	3.2
80°-90°	102.6	0.9
90°-100°	505.0	4.6
100°-110°	1327.7	12.1
110°-120°	1376.7	12.5
120°-130°	1104.3	10.0
130°-140°	866.5	7.9
140°-150°	665.1	6.1
150°-160°	478.9	4.4
160°-170°	293.0	2.7
170°-180°	99.0	0.9
0°-30°	941.1	8.6
0°-40°	1653.4	15.0
0°-60°	3211.1	29.2
0°-90°	4272.8	38.9
90°-120°	3209.4	29.2
90°-150°	5845.2	53.2
90°-180°	6716.0	61.1
0°-180°	10989.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	552	552	552	552	552	
5°	538	577	649	735	761	50
15°	403	744	1253	1519	1567	112
25°	257	843	1492	1558	1560	119
35°	174	806	1405	1485	1544	109
45°	119	642	1242	1423	1487	92
55°	85	408	1054	1224	1258	78
65°	67	216	782	880	892	67
75°	50	133	429	472	474	52
85°	18	41	106	117	119	19
90°	7	19	53	26	26	7
95°	67	261	870	448	305	74
105°	239	362	1468	2228	2079	254
115°	425	516	1176	2345	2677	420
125°	591	663	1070	1807	2132	525
135°	704	775	1036	1459	1654	545
145°	817	869	1023	1245	1342	512
155°	923	949	1023	1123	1156	424
165°	996	1010	1023	1063	1076	281
175°	1036	1036	1030	1043	1043	98
180°	1036	1036	1036	1036	1036	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8
2.5°	551.8	551.8	555.4	557.2	560.6	562.4	566.0	569.6	580.2	582.0	585.5
5°	537.6	544.7	567.8	576.7	601.5	635.2	649.4	672.5	720.4	734.6	743.5
7.5°	516.3	532.3	589.1	603.3	665.4	754.1	791.4	841.1	917.3	954.6	984.8
10°	482.6	516.3	617.5	651.2	752.3	887.2	956.4	1025.6	1140.9	1192.4	1211.9
12.5°	445.3	500.4	647.7	693.8	839.3	1036.2	1119.6	1195.9	1327.2	1396.4	1407.1
15°	402.8	477.3	676.1	743.5	931.5	1160.4	1252.7	1346.7	1469.1	1518.8	1531.3
17.5°	365.6	459.6	702.6	773.6	1002.5	1272.2	1366.2	1444.3	1543.7	1577.4	1586.2
20°	319.4	431.2	720.4	812.7	1077.1	1353.8	1444.3	1504.7	1572.1	1593.4	1596.9
22.5°	285.7	401.0	731.0	826.8	1126.7	1403.5	1479.8	1527.7	1573.9	1580.9	1582.7
25°	257.3	367.3	729.2	842.8	1169.3	1433.7	1492.2	1527.7	1554.4	1557.8	1557.8
27.5°	230.6	330.0	722.2	846.3	1201.2	1440.7	1486.8	1511.7	1524.2	1531.3	1531.3
30°	207.6	294.6	704.4	839.3	1215.4	1433.7	1470.9	1483.4	1495.8	1506.4	1511.7
32.5°	189.9	260.8	677.8	825.0	1217.2	1415.9	1442.5	1449.6	1467.3	1492.2	1501.1
35°	173.9	227.1	647.7	805.5	1206.5	1387.6	1405.3	1412.4	1447.8	1485.1	1497.5
37.5°	157.9	202.3	608.6	771.8	1190.6	1353.8	1366.2	1378.7	1433.7	1478.0	1492.2
40°	141.9	180.9	562.4	734.6	1165.7	1313.0	1323.6	1343.1	1415.9	1467.3	1481.6
42.5°	129.6	163.2	512.7	695.6	1133.8	1266.9	1282.8	1311.2	1394.6	1449.6	1465.6
45°	118.9	145.5	459.6	642.3	1093.0	1219.0	1242.1	1281.1	1369.7	1423.0	1437.2
47.5°	108.2	133.0	404.6	587.3	1048.6	1171.1	1201.2	1245.6	1336.1	1387.6	1399.9
50°	99.4	120.7	349.5	528.8	1000.7	1119.6	1155.1	1201.2	1293.5	1341.4	1357.4
52.5°	92.3	110.0	298.0	470.2	945.7	1066.4	1107.1	1155.1	1242.1	1288.2	1298.8
55°	85.1	101.2	253.7	408.1	889.0	1009.6	1054.0	1100.1	1185.2	1224.2	1231.4
57.5°	81.7	94.0	216.5	349.5	828.6	945.7	995.4	1038.0	1117.8	1148.0	1155.1
60°	76.3	88.7	188.1	299.8	763.0	885.4	928.0	970.5	1038.0	1062.8	1068.1
62.5°	71.0	85.1	166.8	251.9	695.6	814.4	857.0	896.0	952.8	970.5	977.7
65°	67.4	81.7	150.9	216.5	626.4	739.9	782.5	816.2	862.4	880.1	883.6
67.5°	63.8	78.1	138.4	186.3	557.2	665.4	697.3	729.2	764.8	782.5	784.3
70°	58.6	74.5	127.8	165.0	486.2	580.2	606.8	640.5	668.9	677.8	683.1
72.5°	55.0	69.2	120.7	149.1	413.5	498.6	523.4	542.9	567.8	576.7	576.7
75°	49.7	62.1	113.5	133.0	338.9	408.1	429.4	448.9	468.4	472.0	466.6
77.5°	44.3	55.0	97.6	111.8	264.4	322.9	340.7	351.3	367.3	370.8	372.6
80°	37.2	47.9	76.3	86.9	191.6	237.8	250.2	259.0	273.2	273.2	276.8
82.5°	28.4	37.2	55.0	62.1	129.6	163.2	173.9	179.2	188.1	188.1	188.1
85°	17.7	23.1	35.5	40.8	78.1	99.4	106.5	108.2	115.3	117.1	117.1
87.5°	8.9	12.4	23.1	24.8	40.8	51.5	51.5	55.0	55.0	53.3	51.5
90°	7.0	12.5	18.1	19.4	30.5	45.4	52.8	46.9	35.2	26.4	26.4
92.5°	27.8	75.1	122.4	134.2	188.6	261.3	297.6	260.8	187.3	132.1	126.9
95°	66.8	153.3	239.8	261.4	464.2	734.7	869.9	776.2	588.9	448.5	432.5
97.5°	115.4	191.7	268.1	287.1	625.3	1076.3	1301.7	1242.5	1124.2	1035.3	1005.1
100°	153.0	222.2	291.4	308.7	683.9	1184.3	1434.5	1438.8	1447.5	1453.9	1417.8
102.5°	185.0	249.5	314.2	330.3	710.9	1218.3	1472.0	1547.4	1698.2	1811.3	1780.4
105°	239.2	293.9	348.5	362.2	730.8	1222.2	1467.9	1636.9	1975.0	2228.5	2211.9
107.5°	294.8	345.8	396.8	409.5	734.5	1167.8	1384.4	1620.2	2091.8	2445.5	2449.5
110°	332.3	378.4	424.4	435.9	728.9	1119.5	1314.9	1578.4	2105.7	2501.1	2518.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	369.2	413.1	457.0	468.0	729.1	1077.4	1251.6	1521.3	2060.9	2465.6	2492.2
115°	424.8	465.3	505.9	516.0	735.9	1029.2	1175.8	1435.7	1955.5	2345.4	2382.2
117.5°	479.8	516.6	553.3	562.5	749.6	998.9	1123.6	1358.2	1827.3	2179.2	2220.0
120°	511.8	546.4	581.0	589.7	760.7	988.7	1102.8	1317.1	1745.7	2067.2	2106.9
122.5°	543.1	578.0	612.9	621.6	776.7	983.4	1086.8	1279.8	1665.8	1955.3	1994.4
125°	591.0	622.9	654.7	662.6	798.3	979.0	1069.5	1233.4	1561.2	1807.2	1843.3
127.5°	629.9	662.1	694.2	702.3	819.8	976.5	1054.9	1195.6	1477.2	1688.3	1718.7
130°	650.8	685.5	720.0	728.7	835.5	977.9	1049.2	1174.6	1425.2	1613.2	1641.3
132.5°	672.4	707.0	741.6	750.3	848.3	979.0	1044.4	1156.6	1380.9	1549.2	1574.3
135°	704.3	735.9	767.4	775.3	862.2	978.1	1036.1	1130.0	1317.9	1458.8	1480.5
137.5°	737.0	768.3	799.5	807.3	883.0	984.1	1034.6	1114.0	1272.9	1392.0	1409.8
140°	764.1	792.9	821.6	828.8	895.8	985.1	1029.8	1098.4	1235.6	1338.5	1355.1
142.5°	785.0	811.6	838.2	844.8	906.5	988.7	1029.8	1090.0	1210.6	1301.0	1315.3
145°	817.0	840.2	863.3	869.2	920.4	988.7	1022.8	1072.1	1170.7	1244.7	1255.5
147.5°	849.0	871.6	894.1	899.8	940.8	995.5	1022.8	1061.6	1139.2	1197.4	1206.3
150°	869.9	890.3	910.6	915.7	951.4	999.0	1022.8	1055.6	1121.1	1170.3	1177.5
152.5°	891.4	906.9	922.4	926.2	958.4	1001.3	1022.8	1050.7	1106.7	1148.7	1154.1
155°	923.4	934.9	946.3	949.1	973.7	1006.4	1022.8	1045.1	1089.6	1123.0	1126.7
157.5°	947.1	958.2	969.3	972.0	989.0	1011.5	1022.8	1040.1	1074.7	1100.7	1103.2
160°	963.0	971.7	980.4	982.5	995.9	1013.9	1022.8	1037.7	1067.3	1089.6	1091.0
162.5°	979.0	985.5	992.0	993.6	1003.4	1016.4	1022.8	1035.3	1060.3	1079.1	1080.6
165°	996.4	1002.3	1008.2	1009.6	1014.0	1019.8	1022.8	1031.8	1049.8	1063.2	1064.6
167.5°	1012.4	1015.2	1018.0	1018.7	1022.4	1027.3	1029.8	1035.7	1047.4	1056.2	1056.8
170°	1022.8	1025.6	1028.4	1029.1	1029.3	1029.6	1029.8	1035.7	1047.4	1056.2	1056.2
172.5°	1028.4	1029.0	1029.6	1029.8	1029.8	1029.8	1029.8	1034.4	1043.7	1050.6	1050.1
175°	1036.1	1036.1	1036.1	1036.1	1034.0	1031.2	1029.8	1032.7	1038.7	1043.0	1043.0
177.5°	1036.1	1036.1	1036.1	1036.1	1034.4	1032.2	1031.1	1033.5	1038.1	1041.6	1041.0
180°	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	551.8	551.8
2.5°	589.1	585.5
5°	757.6	761.2
7.5°	1020.2	1018.5
10°	1268.7	1284.6
12.5°	1449.6	1453.2
15°	1559.6	1566.7
17.5°	1602.3	1604.0
20°	1604.0	1600.5
22.5°	1584.4	1580.9
25°	1561.4	1559.6
27.5°	1540.1	1541.9
30°	1531.3	1536.5
32.5°	1531.3	1540.1
35°	1534.8	1543.7
37.5°	1533.0	1543.7
40°	1525.9	1538.3
42.5°	1506.4	1515.3
45°	1476.3	1486.8
47.5°	1437.2	1444.3
50°	1387.6	1394.6
52.5°	1325.4	1327.2
55°	1250.9	1258.0
57.5°	1171.1	1172.9
60°	1082.3	1087.6
62.5°	988.3	988.3
65°	889.0	892.4
67.5°	786.0	794.9
70°	681.3	683.1
72.5°	578.5	578.5
75°	472.0	473.7
77.5°	370.8	370.8
80°	275.0	276.8
82.5°	189.9	193.4
85°	118.9	118.9
87.5°	55.0	49.7
90°	26.4	26.4
92.5°	105.8	84.8
95°	368.9	305.2
97.5°	883.9	762.8
100°	1273.6	1129.3
102.5°	1656.8	1533.2
105°	2145.4	2079.0
107.5°	2465.5	2481.6
110°	2587.6	2656.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2598.5	2704.8
115°	2529.6	2677.0
117.5°	2383.5	2547.0
120°	2265.8	2424.6
122.5°	2151.1	2307.8
125°	1987.6	2131.9
127.5°	1840.5	1962.3
130°	1753.8	1866.3
132.5°	1675.1	1775.9
135°	1567.3	1654.2
137.5°	1480.8	1551.9
140°	1421.6	1488.0
142.5°	1372.4	1429.6
145°	1298.7	1342.0
147.5°	1242.2	1278.1
150°	1206.6	1235.6
152.5°	1176.1	1198.0
155°	1141.2	1155.7
157.5°	1113.4	1123.6
160°	1096.9	1102.8
162.5°	1086.1	1091.7
165°	1070.5	1076.3
167.5°	1059.2	1061.8
170°	1056.2	1056.2
172.5°	1048.0	1045.8
175°	1043.0	1043.0
177.5°	1038.6	1036.1
180°	1036.1	1036.1



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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	4.16	4.95	5.20	6.00	7.42	17.32	18.12	18.36	19.17	20.59
	3H	4.86	5.57	5.91	6.63	8.07	19.15	19.87	20.20	20.93	22.36
	4H	5.15	5.83	6.21	6.89	8.34	19.79	20.47	20.85	21.53	22.97
	6H	5.40	6.03	6.47	7.09	8.55	20.21	20.84	21.28	21.90	23.36
	8H	5.46	6.06	6.54	7.14	8.59	20.33	20.92	21.40	22.01	23.46
	12H	5.48	6.05	6.56	7.12	8.60	20.39	20.96	21.47	22.03	23.51
4H	2H	11.35	12.03	12.42	13.10	14.54	17.59	18.27	18.66	19.33	20.77
	3H	12.92	13.49	13.99	14.57	16.03	19.62	20.19	20.70	21.28	22.74
	4H	13.01	13.53	14.09	14.61	16.09	20.38	20.90	21.46	21.98	23.46
	6H	13.02	13.47	14.11	14.57	16.04	20.91	21.36	22.00	22.47	23.94
	8H	12.99	13.41	14.08	14.51	15.99	21.07	21.49	22.16	22.59	24.08
	12H	12.94	13.33	14.05	14.43	15.93	21.16	21.54	22.27	22.65	24.14
8H	4H	14.45	14.86	15.54	15.96	17.45	20.44	20.86	21.53	21.95	23.44
	6H	14.68	15.03	15.80	16.17	17.65	21.06	21.41	22.17	22.54	24.03
	8H	14.70	15.01	15.82	16.12	17.63	21.28	21.58	22.40	22.70	24.20
	12H	14.67	14.93	15.79	16.05	17.59	21.41	21.68	22.54	22.80	24.34
12H	4H	14.58	14.96	15.69	16.07	17.57	20.39	20.77	21.50	21.88	23.37
	6H	14.94	15.25	16.06	16.36	17.87	21.04	21.35	22.16	22.47	23.97
	8H	15.01	15.27	16.13	16.39	17.93	21.27	21.53	22.39	22.65	24.19