

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: P937404

Luminaire Tested: SQ4-FB-075U-125D-B40-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937404
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-125D-B40-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

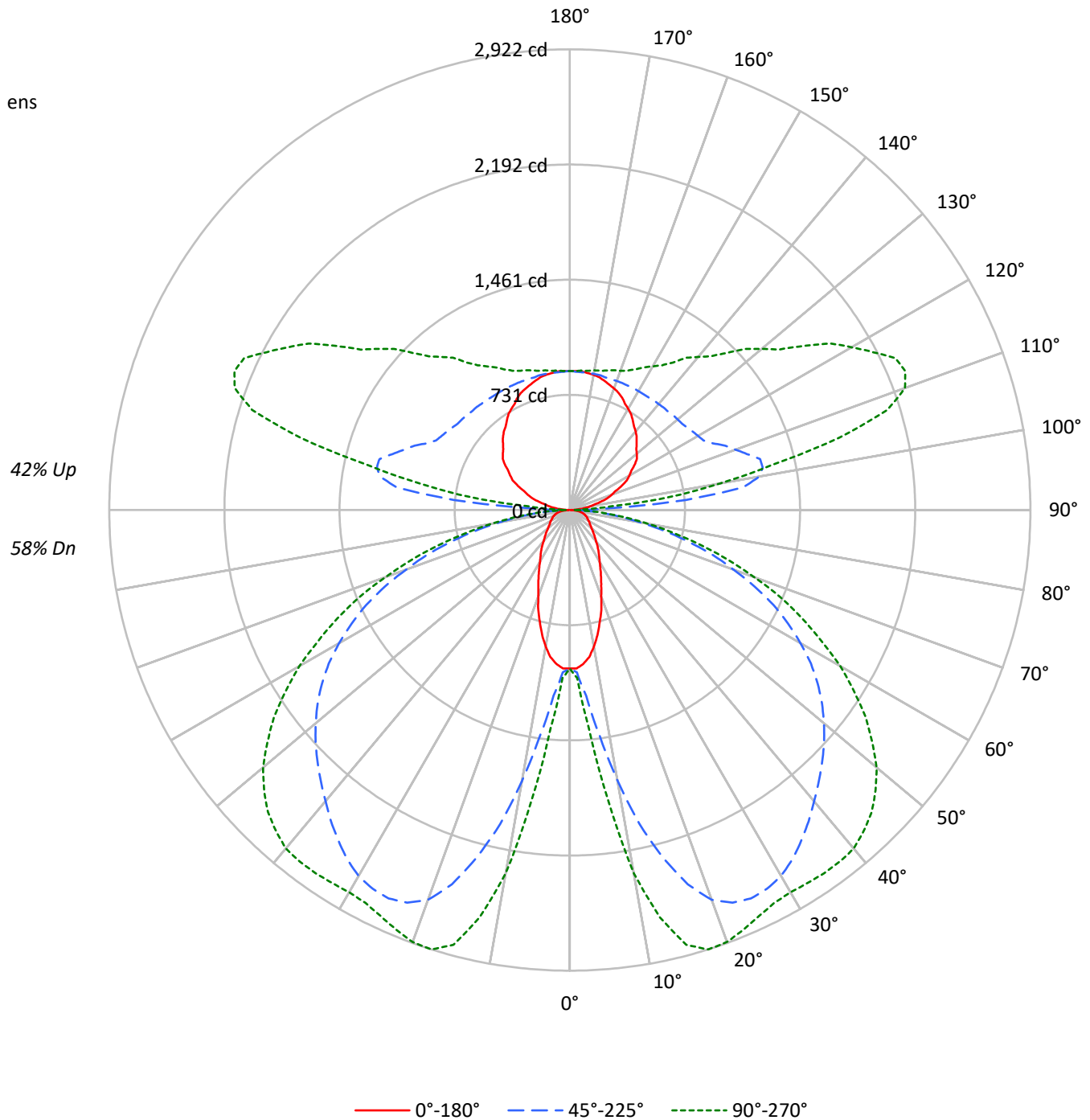
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13499.0 lumens
Efficiency: N/A
Efficacy: 108.9 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: General Diffuse

Input Watts (W): 124
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4556	5391	6269
10°	4133	7858	10393
15°	3512	10266	12550
20°	2860	11897	12790
25°	2385	12449	12530
30°	2012	12528	12506
35°	1779	12320	12830
40°	1550	12050	13164
45°	1404	11851	13216
50°	1287	11673	12997
55°	1233	11413	12421
60°	1262	10911	11511
65°	1313	10149	10261
70°	1399	8851	8669
75°	1550	7217	6765
80°	1694	5004	4558
85°	1504	2656	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13216 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	1.0
10°-20°	576.3	4.3
20°-30°	1008.1	7.5
30°-40°	1297.7	9.6
40°-50°	1449.4	10.7
50°-60°	1388.2	10.3
60°-70°	1100.2	8.2
70°-80°	646.9	4.8
80°-90°	183.1	1.4
90°-100°	430.0	3.2
100°-110°	1130.6	8.4
110°-120°	1172.3	8.7
120°-130°	940.3	7.0
130°-140°	737.8	5.5
140°-150°	566.3	4.2
150°-160°	407.8	3.0
160°-170°	249.5	1.8
170°-180°	84.3	0.6
0°-30°	1714.4	12.7
0°-40°	3012.1	22.3
0°-60°	5849.7	43.3
0°-90°	7780.0	57.6
90°-120°	2732.9	20.2
90°-150°	4977.3	36.9
90°-180°	5719.0	42.4
0°-180°	13499.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	979	1050	1183	1338	1387	90
15°	734	1354	2282	2767	2854	204
25°	469	1535	2718	2838	2841	216
35°	317	1468	2560	2705	2812	198
45°	217	1170	2263	2592	2709	168
55°	155	744	1920	2230	2292	141
65°	123	394	1425	1603	1626	122
75°	90	242	782	860	863	95
85°	32	74	194	213	217	34
90°	6	17	45	22	22	7
95°	57	223	741	382	260	63
105°	204	308	1250	1898	1770	216
115°	362	439	1001	1997	2280	357
125°	503	564	911	1539	1815	447
135°	600	660	882	1242	1408	464
145°	696	740	871	1060	1143	436
155°	786	808	871	956	984	361
165°	848	860	871	905	916	239
175°	882	882	877	888	888	84
180°	882	882	882	882	882	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2
2.5°	1005.2	1005.2	1011.7	1015.0	1021.4	1024.6	1031.1	1037.6	1057.0	1060.2	1066.6
5°	979.4	992.3	1034.4	1050.5	1095.8	1157.2	1183.1	1225.1	1312.3	1338.1	1354.3
7.5°	940.6	969.7	1073.1	1099.0	1212.1	1373.8	1441.6	1532.1	1671.1	1739.0	1794.0
10°	879.2	940.6	1124.8	1186.2	1370.5	1616.1	1742.2	1868.3	2078.4	2172.1	2207.7
12.5°	811.3	911.5	1179.8	1263.8	1528.9	1887.7	2039.6	2178.5	2417.8	2543.8	2563.2
15°	733.7	869.5	1231.5	1354.3	1696.9	2113.9	2282.0	2453.3	2676.4	2766.8	2789.5
17.5°	665.8	837.2	1280.0	1409.3	1826.2	2317.6	2488.8	2631.1	2812.1	2873.5	2889.6
20°	581.8	785.5	1312.3	1480.3	1962.0	2466.3	2631.1	2740.9	2863.9	2902.6	2909.0
22.5°	520.4	730.5	1331.7	1506.2	2052.5	2556.7	2695.8	2783.0	2867.0	2880.0	2883.2
25°	468.7	669.1	1328.5	1535.4	2130.1	2611.7	2718.4	2783.0	2831.5	2838.0	2838.0
27.5°	420.2	601.2	1315.5	1541.8	2188.3	2624.6	2708.7	2753.9	2776.6	2789.5	2789.5
30°	378.2	536.5	1283.2	1528.9	2214.2	2611.7	2679.5	2702.2	2724.8	2744.2	2753.9
32.5°	345.9	475.1	1234.7	1503.0	2217.3	2579.4	2627.9	2640.8	2673.1	2718.4	2734.5
35°	316.8	413.7	1179.8	1467.5	2197.9	2527.7	2560.0	2572.9	2637.5	2705.4	2728.1
37.5°	287.6	368.4	1108.7	1406.0	2168.9	2466.3	2488.8	2511.5	2611.7	2692.5	2718.4
40°	258.6	329.7	1024.6	1338.1	2123.6	2391.9	2411.3	2446.8	2579.4	2673.1	2698.9
42.5°	236.0	297.4	934.2	1267.1	2065.5	2307.9	2337.0	2388.6	2540.6	2640.8	2669.9
45°	216.6	265.0	837.2	1170.1	1991.1	2220.6	2262.6	2333.7	2495.3	2592.3	2618.1
47.5°	197.2	242.4	737.0	1069.9	1910.3	2133.3	2188.3	2269.1	2433.9	2527.7	2550.3
50°	181.0	219.8	636.8	963.2	1823.0	2039.6	2104.2	2188.3	2356.4	2443.7	2472.7
52.5°	168.1	200.4	543.0	856.5	1722.8	1942.6	2017.0	2104.2	2262.6	2346.6	2366.0
55°	155.2	184.2	462.2	743.5	1619.4	1839.1	1920.0	2004.1	2159.2	2230.3	2243.2
57.5°	148.7	171.3	394.3	636.8	1509.5	1722.8	1813.4	1890.9	2036.3	2091.3	2104.2
60°	139.0	161.6	342.7	546.3	1389.9	1612.9	1690.4	1768.1	1890.9	1936.2	1945.8
62.5°	129.3	155.2	303.9	459.0	1267.1	1483.6	1561.2	1632.3	1735.7	1768.1	1781.0
65°	122.8	148.7	274.8	394.3	1141.0	1347.9	1425.4	1486.8	1570.9	1603.3	1609.7
67.5°	116.3	142.2	252.1	339.4	1015.0	1212.1	1270.2	1328.5	1393.2	1425.4	1428.7
70°	106.7	135.8	232.7	300.6	885.7	1057.0	1105.4	1166.8	1218.6	1234.7	1244.5
72.5°	100.2	126.1	219.8	271.5	753.1	908.3	953.6	989.1	1034.4	1050.5	1050.5
75°	90.5	113.2	206.9	242.4	617.4	743.5	782.2	817.8	853.3	859.8	850.1
77.5°	80.8	100.2	177.8	203.6	481.6	588.3	620.6	640.0	669.1	675.6	678.8
80°	67.9	87.3	139.0	158.3	349.1	433.1	455.7	472.0	497.7	497.7	504.2
82.5°	51.8	67.9	100.2	113.2	236.0	297.4	316.8	326.4	342.7	342.7	342.7
85°	32.3	42.0	64.7	74.3	142.2	181.0	194.0	197.2	210.1	213.3	213.3
87.5°	16.1	22.6	42.0	45.3	74.3	93.8	93.8	100.2	100.2	96.9	93.8
90°	5.9	10.7	15.5	16.6	26.1	38.7	45.0	40.0	30.0	22.5	22.5
92.5°	23.7	64.0	104.3	114.3	160.7	222.5	253.5	222.1	159.5	112.5	108.0
95°	56.8	130.5	204.2	222.6	395.3	625.5	740.7	661.0	501.5	381.9	368.3
97.5°	98.3	163.3	228.3	244.6	532.5	916.4	1108.4	1057.9	957.2	881.7	855.9
100°	130.3	189.2	248.2	262.9	582.5	1008.5	1221.4	1225.2	1232.5	1238.1	1207.3
102.5°	157.5	212.5	267.5	281.2	605.3	1037.4	1253.4	1317.6	1446.1	1542.4	1516.1
105°	203.7	250.3	296.8	308.5	622.3	1040.7	1249.9	1393.8	1681.7	1897.6	1883.5
107.5°	251.1	294.5	337.9	348.8	625.4	994.3	1178.9	1379.6	1781.2	2082.4	2085.8
110°	283.1	322.2	361.4	371.2	620.7	953.3	1119.6	1344.1	1793.0	2129.7	2144.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	314.4	351.7	389.1	398.4	620.8	917.5	1065.8	1295.6	1755.0	2099.6	2122.2
115°	361.8	396.2	430.7	439.3	626.6	876.3	1001.2	1222.5	1665.1	1997.1	2028.5
117.5°	408.5	439.9	471.2	479.0	638.3	850.6	956.8	1156.5	1556.0	1855.6	1890.3
120°	435.8	465.2	494.7	502.0	647.7	841.9	939.1	1121.6	1486.6	1760.3	1794.1
122.5°	462.4	492.2	521.9	529.4	661.3	837.3	925.4	1089.8	1418.5	1664.9	1698.3
125°	503.3	530.4	557.4	564.2	679.7	833.6	910.6	1050.2	1329.4	1538.8	1569.5
127.5°	536.4	563.8	591.1	598.0	698.1	831.5	898.2	1018.0	1257.7	1437.6	1463.4
130°	554.2	583.6	613.1	620.5	711.5	832.9	893.5	1000.2	1213.6	1373.7	1397.6
132.5°	572.5	602.0	631.5	638.9	722.4	833.6	889.3	984.8	1175.9	1319.1	1340.6
135°	599.7	626.6	653.5	660.2	734.2	832.9	882.2	962.3	1122.2	1242.2	1260.7
137.5°	627.6	654.2	680.7	687.4	752.0	838.0	881.0	948.6	1083.9	1185.3	1200.4
140°	650.7	675.2	699.6	705.7	762.8	838.9	876.9	935.3	1052.1	1139.8	1153.9
142.5°	668.5	691.1	713.8	719.4	771.9	841.9	876.9	928.2	1030.8	1107.8	1119.9
145°	695.7	715.5	735.2	740.1	783.8	841.9	871.0	913.0	996.9	1059.9	1069.0
147.5°	722.9	742.1	761.4	766.2	801.1	847.7	871.0	904.0	970.0	1019.6	1027.2
150°	740.7	758.1	775.5	779.8	810.1	850.7	871.0	898.8	954.6	996.4	1002.7
152.5°	759.0	772.2	785.4	788.6	816.0	852.6	871.0	894.7	942.4	978.1	982.8
155°	786.3	796.0	805.7	808.2	829.1	857.0	871.0	889.9	927.8	956.2	959.3
157.5°	806.4	815.9	825.3	827.7	842.1	861.3	871.0	885.7	915.2	937.2	939.4
160°	820.1	827.4	834.8	836.6	848.0	863.3	871.0	883.6	908.9	927.8	929.0
162.5°	833.6	839.2	844.7	846.1	854.4	865.4	871.0	881.7	903.0	918.9	920.0
165°	848.4	853.4	858.4	859.7	863.4	868.5	871.0	878.6	893.9	905.3	906.6
167.5°	862.1	864.5	866.9	867.4	870.6	874.8	876.9	881.8	891.9	899.4	899.9
170°	871.0	873.3	875.7	876.3	876.5	876.8	876.9	881.8	891.9	899.4	899.4
172.5°	875.7	876.2	876.8	876.9	876.9	876.9	876.9	880.8	888.7	894.6	894.2
175°	882.2	882.2	882.2	882.2	880.4	878.0	876.9	879.4	884.4	888.2	888.2
177.5°	882.2	882.2	882.2	882.2	880.8	879.0	878.0	880.0	883.9	886.9	886.4
180°	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1005.2	1005.2
2.5°	1073.1	1066.6
5°	1380.2	1386.7
7.5°	1858.5	1855.4
10°	2311.1	2340.2
12.5°	2640.8	2647.3
15°	2841.2	2854.1
17.5°	2918.8	2922.0
20°	2922.0	2915.5
22.5°	2886.5	2880.0
25°	2844.5	2841.2
27.5°	2805.6	2808.8
30°	2789.5	2799.2
32.5°	2789.5	2805.6
35°	2796.0	2812.1
37.5°	2792.7	2812.1
40°	2779.8	2802.4
42.5°	2744.2	2760.4
45°	2689.3	2708.7
47.5°	2618.1	2631.1
50°	2527.7	2540.6
52.5°	2414.5	2417.8
55°	2278.7	2291.7
57.5°	2133.3	2136.5
60°	1971.7	1981.4
62.5°	1800.4	1800.4
65°	1619.4	1625.9
67.5°	1431.9	1448.1
70°	1241.2	1244.5
72.5°	1053.7	1053.7
75°	859.8	863.0
77.5°	675.6	675.6
80°	501.0	504.2
82.5°	345.9	352.3
85°	216.6	216.6
87.5°	100.2	90.5
90°	22.5	22.5
92.5°	90.2	72.2
95°	314.2	260.0
97.5°	752.6	649.5
100°	1084.5	961.6
102.5°	1410.8	1305.6
105°	1826.8	1770.3
107.5°	2099.5	2113.1
110°	2203.5	2262.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2212.6	2303.2
115°	2154.0	2279.5
117.5°	2029.6	2168.8
120°	1929.4	2064.6
122.5°	1831.7	1965.1
125°	1692.5	1815.4
127.5°	1567.2	1670.9
130°	1493.3	1589.1
132.5°	1426.4	1512.1
135°	1334.6	1408.5
137.5°	1261.0	1321.5
140°	1210.6	1267.1
142.5°	1168.6	1217.3
145°	1105.9	1142.8
147.5°	1057.7	1088.2
150°	1027.4	1052.1
152.5°	1001.4	1020.1
155°	971.7	984.0
157.5°	948.1	956.8
160°	934.1	939.1
162.5°	924.8	929.6
165°	911.5	916.5
167.5°	902.0	904.1
170°	899.4	899.4
172.5°	892.4	890.5
175°	888.2	888.2
177.5°	884.3	882.2
180°	882.2	882.2



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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	7.02	8.00	7.90	8.91	10.06	20.20	21.18	21.08	22.09	23.24
	3H	7.74	8.62	8.63	9.53	10.71	22.05	22.93	22.94	23.85	25.03
	4H	8.04	8.88	8.95	9.80	10.99	22.70	23.54	23.61	24.46	25.65
	6H	8.30	9.07	9.22	10.00	11.20	23.14	23.91	24.06	24.84	26.04
	8H	8.37	9.10	9.30	10.05	11.25	23.26	24.00	24.19	24.94	26.14
	12H	8.39	9.09	9.32	10.03	11.26	23.33	24.03	24.27	24.97	26.20
4H	2H	14.25	15.09	15.16	16.01	17.20	20.49	21.32	21.40	22.25	23.44
	3H	15.83	16.53	16.75	17.48	18.69	22.55	23.25	23.47	24.20	25.40
	4H	15.93	16.57	16.87	17.52	18.75	23.32	23.96	24.25	24.91	26.13
	6H	15.95	16.50	16.90	17.47	18.70	23.86	24.42	24.81	25.39	26.62
	8H	15.93	16.45	16.88	17.41	18.66	24.03	24.55	24.98	25.51	26.76
	12H	15.89	16.36	16.86	17.34	18.59	24.13	24.60	25.10	25.58	26.83
8H	4H	17.39	17.90	18.34	18.87	20.11	23.39	23.91	24.34	24.87	26.12
	6H	17.63	18.06	18.61	19.07	20.31	24.02	24.45	25.00	25.46	26.70
	8H	17.65	18.03	18.64	19.03	20.29	24.25	24.63	25.23	25.62	26.88
	12H	17.63	17.96	18.62	18.95	20.26	24.40	24.73	25.39	25.72	27.03
12H	4H	17.53	18.00	18.51	18.99	20.24	23.35	23.82	24.32	24.80	26.05
	6H	17.89	18.27	18.88	19.27	20.53	24.01	24.39	24.99	25.38	26.64
	8H	17.97	18.30	18.96	19.29	20.60	24.24	24.58	25.24	25.57	26.88