

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: P936593

Luminaire Tested: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

**Test Information**

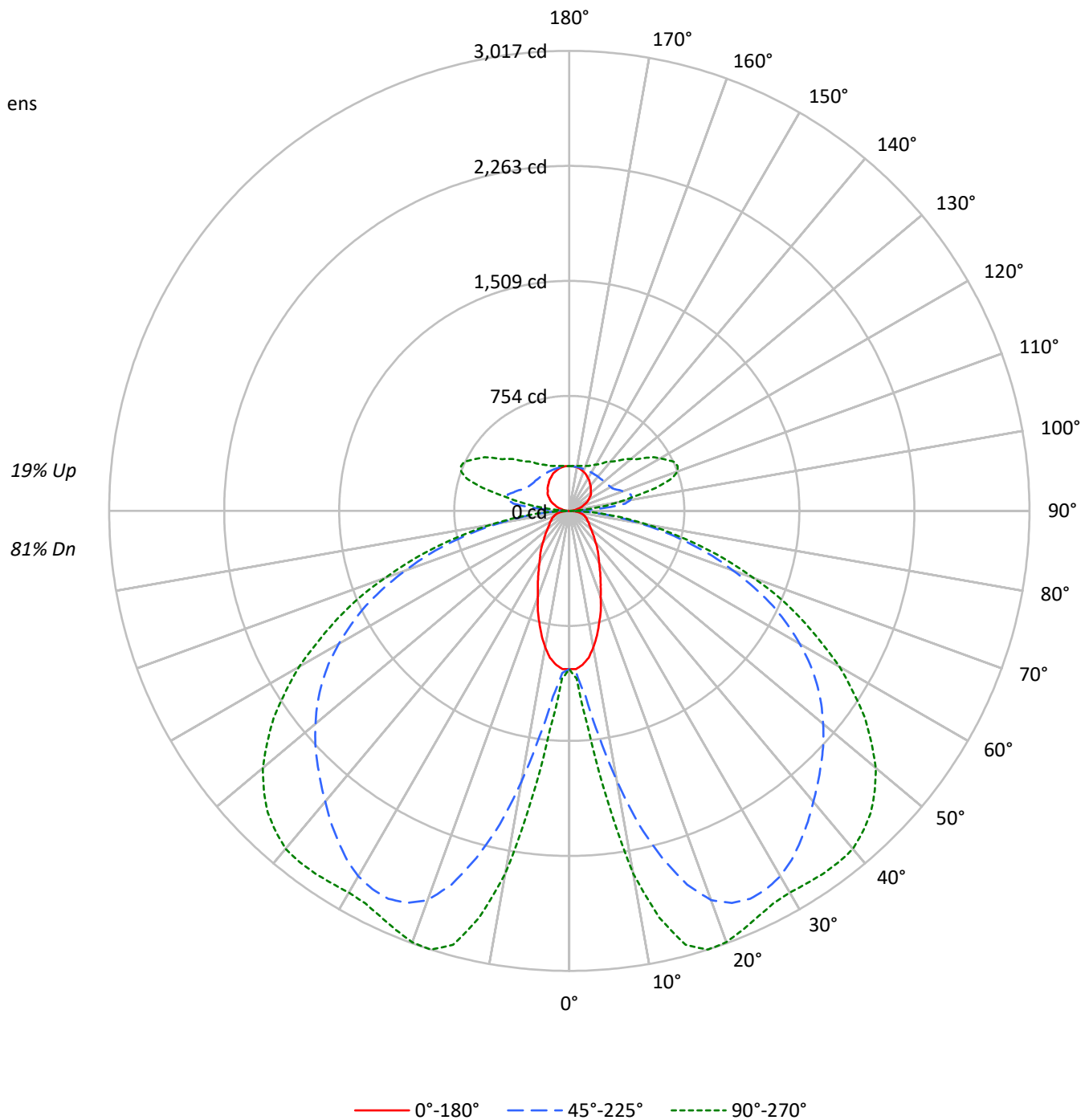
Test Method: LM-79-2019  
Report Number: P936593  
REPORT IS A COMBINATION OF REPORTS P933456 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9937.9 lumens  
Efficiency: N/A  
Efficacy: 100.2 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-Direct  
  
Input Watts (W): 99.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4815	4815	4815
5°	4704	5566	6473
10°	4267	8113	10731
15°	3626	10599	12957
20°	2952	12283	13205
25°	2463	12853	12937
30°	2077	12934	12913
35°	1837	12720	13246
40°	1600	12441	13592
45°	1449	12236	13645
50°	1329	12053	13419
55°	1273	11783	12824
60°	1303	11265	11885
65°	1356	10479	10595
70°	1444	9138	8950
75°	1601	7451	6984
80°	1749	5167	4706
85°	1551	2742	2409

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13645 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.3	1.4
10°-20°	595.0	6.0
20°-30°	1040.8	10.5
30°-40°	1339.8	13.5
40°-50°	1496.5	15.1
50°-60°	1433.3	14.4
60°-70°	1135.9	11.4
70°-80°	667.9	6.7
80°-90°	186.7	1.9
90°-100°	143.4	1.4
100°-110°	377.1	3.8
110°-120°	391.1	3.9
120°-130°	313.7	3.2
130°-140°	246.1	2.5
140°-150°	188.9	1.9
150°-160°	136.0	1.4
160°-170°	83.2	0.8
170°-180°	28.1	0.3
0°-30°	1770.0	17.8
0°-40°	3109.8	31.3
0°-60°	6039.6	60.8
0°-90°	8030.1	80.8
90°-120°	911.7	9.2
90°-150°	1660.4	16.7
90°-180°	1908.0	19.2
0°-180°	9937.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1011	1085	1222	1382	1432	93
15°	758	1398	2356	2857	2947	211
25°	484	1585	2807	2930	2933	223
35°	327	1515	2643	2793	2903	204
45°	224	1208	2336	2676	2797	173
55°	160	768	1982	2303	2366	146
65°	127	407	1472	1655	1679	126
75°	94	250	808	888	891	98
85°	33	77	200	220	224	35
90°	2	6	15	8	8	4
95°	19	74	247	127	87	21
105°	68	103	417	633	590	72
115°	121	146	334	666	760	119
125°	168	188	304	513	606	149
135°	200	220	294	414	470	155
145°	232	247	291	354	381	145
155°	262	270	291	319	328	121
165°	283	287	291	302	306	80
175°	294	294	292	296	296	28
180°	294	294	294	294	294	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9	1037.9
2.5°	1037.9	1037.9	1044.6	1047.9	1054.5	1057.9	1064.6	1071.3	1091.3	1094.7	1101.3
5°	1011.1	1024.6	1067.9	1084.6	1131.3	1194.7	1221.5	1264.8	1354.9	1381.6	1398.2
7.5°	971.1	1001.2	1108.0	1134.7	1251.4	1418.4	1488.4	1581.8	1725.3	1795.4	1852.2
10°	907.7	971.1	1161.3	1224.7	1415.0	1668.6	1798.8	1928.9	2145.8	2242.7	2279.3
12.5°	837.6	941.1	1218.1	1304.9	1578.5	1948.9	2105.8	2249.3	2496.3	2626.4	2646.4
15°	757.5	897.8	1271.4	1398.2	1752.0	2182.5	2356.0	2532.9	2763.3	2856.6	2880.0
17.5°	687.4	864.3	1321.5	1455.0	1885.5	2392.8	2569.6	2716.5	2903.4	2966.8	2983.4
20°	600.7	811.0	1354.9	1528.4	2025.7	2546.3	2716.5	2829.9	2956.8	2996.8	3003.5
22.5°	537.3	754.2	1375.0	1555.1	2119.1	2639.7	2783.3	2873.3	2960.1	2973.5	2976.8
25°	483.9	690.8	1371.6	1585.2	2199.3	2696.5	2806.6	2873.3	2923.4	2930.1	2930.1
27.5°	433.8	620.7	1358.2	1591.9	2259.3	2709.8	2796.6	2843.3	2866.7	2880.0	2880.0
30°	390.5	553.9	1324.9	1578.5	2286.0	2696.5	2766.5	2789.9	2813.3	2833.3	2843.3
32.5°	357.1	490.5	1274.8	1551.8	2289.3	2663.1	2713.2	2726.5	2759.9	2806.6	2823.3
35°	327.1	427.1	1218.1	1515.1	2269.3	2609.7	2643.1	2656.4	2723.1	2793.2	2816.6
37.5°	297.0	380.4	1144.6	1451.7	2239.3	2546.3	2569.6	2593.0	2696.5	2779.9	2806.6
40°	267.0	340.4	1057.9	1381.6	2192.6	2469.5	2489.6	2526.2	2663.1	2759.9	2786.5
42.5°	243.6	307.0	964.5	1308.2	2132.5	2382.8	2412.8	2466.2	2623.1	2726.5	2756.6
45°	223.6	273.6	864.3	1208.0	2055.7	2292.6	2336.0	2409.5	2576.3	2676.5	2703.1
47.5°	203.6	250.2	760.9	1104.6	1972.3	2202.5	2259.3	2342.7	2512.9	2609.7	2633.1
50°	186.8	227.0	657.5	994.5	1882.2	2105.8	2172.6	2259.3	2432.9	2523.0	2553.0
52.5°	173.5	206.9	560.6	884.3	1778.7	2005.6	2082.4	2172.6	2336.0	2422.8	2442.8
55°	160.2	190.2	477.2	767.6	1672.0	1898.8	1982.4	2069.1	2229.2	2302.7	2316.0
57.5°	153.5	176.9	407.1	657.5	1558.5	1778.7	1872.2	1952.3	2102.4	2159.1	2172.6
60°	143.5	166.8	353.8	564.0	1435.0	1665.3	1745.3	1825.5	1952.3	1999.0	2009.0
62.5°	133.5	160.2	313.7	473.9	1308.2	1531.8	1611.9	1685.3	1792.1	1825.5	1838.8
65°	126.8	153.5	283.7	407.1	1178.1	1391.6	1471.7	1535.1	1621.9	1655.3	1661.9
67.5°	120.1	146.8	260.3	350.4	1047.9	1251.4	1311.5	1371.6	1438.4	1471.7	1475.1
70°	110.1	140.2	240.3	310.4	914.4	1091.3	1141.3	1204.7	1258.1	1274.8	1284.9
72.5°	103.4	130.2	227.0	280.3	777.6	937.8	984.5	1021.2	1067.9	1084.6	1084.6
75°	93.5	116.8	213.6	250.2	637.4	767.6	807.6	844.3	881.0	887.7	877.7
77.5°	83.4	103.4	183.6	210.2	497.2	607.4	640.7	660.8	690.8	697.5	700.8
80°	70.1	90.1	143.5	163.5	360.4	447.2	470.5	487.3	513.9	513.9	520.6
82.5°	53.4	70.1	103.4	116.8	243.6	307.0	327.1	337.0	353.8	353.8	353.8
85°	33.3	43.4	66.8	76.7	146.8	186.8	200.3	203.6	216.9	220.3	220.3
87.5°	16.7	23.4	43.4	46.7	76.7	96.8	96.8	103.4	103.4	100.1	96.8
90°	2.0	3.5	5.1	5.5	8.7	12.9	15.0	13.3	10.0	7.5	7.5
92.5°	7.9	21.3	34.8	38.2	53.6	74.2	84.5	74.0	53.2	37.6	36.1
95°	18.9	43.5	68.1	74.2	131.8	208.6	247.1	220.5	167.3	127.4	122.9
97.5°	32.8	54.5	76.1	81.5	177.6	305.7	369.8	353.0	319.4	294.1	285.5
100°	43.5	63.1	82.7	87.7	194.2	336.3	407.4	408.7	411.2	413.0	402.8
102.5°	52.6	70.9	89.2	93.8	201.9	346.1	418.2	439.6	482.4	514.5	505.7
105°	67.9	83.5	99.1	102.9	207.7	347.2	417.0	465.0	561.0	633.0	628.3
107.5°	83.7	98.2	112.7	116.3	208.6	331.7	393.2	460.2	594.2	694.6	695.8
110°	94.5	107.5	120.6	123.8	207.1	318.0	373.5	448.3	598.1	710.4	715.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	104.9	117.3	129.8	132.9	207.2	306.1	355.6	432.2	585.4	700.4	707.9
115°	120.7	132.1	143.7	146.5	209.0	292.3	334.0	407.8	555.5	666.2	676.7
117.5°	136.3	146.7	157.2	159.8	213.0	283.8	319.2	385.8	519.0	619.0	630.6
120°	145.3	155.2	165.1	167.5	216.1	280.9	313.3	374.1	495.9	587.2	598.4
122.5°	154.2	164.2	174.1	176.6	220.7	279.3	308.7	363.5	473.2	555.4	566.6
125°	167.9	177.0	186.0	188.2	226.8	278.2	303.8	350.3	443.5	513.3	523.6
127.5°	179.0	188.0	197.2	199.5	232.9	277.4	299.6	339.7	419.6	479.6	488.3
130°	184.9	194.7	204.5	207.0	237.3	277.9	298.1	333.7	404.9	458.2	466.2
132.5°	191.0	200.8	210.6	213.1	241.0	278.2	296.7	328.5	392.2	440.1	447.2
135°	200.1	209.0	218.0	220.3	244.9	277.9	294.3	321.0	374.4	414.4	420.5
137.5°	209.3	218.2	227.1	229.3	250.8	279.5	293.9	316.5	361.6	395.4	400.4
140°	217.0	225.2	233.4	235.5	254.5	279.8	292.5	312.1	351.0	380.2	384.9
142.5°	223.0	230.5	238.1	240.0	257.5	280.9	292.5	309.7	343.9	369.6	373.6
145°	232.1	238.7	245.2	246.9	261.5	280.9	290.6	304.6	332.6	353.6	356.6
147.5°	241.2	247.6	254.0	255.6	267.2	282.8	290.6	301.6	323.6	340.1	342.6
150°	247.1	252.9	258.6	260.1	270.3	283.8	290.6	299.8	318.5	332.4	334.5
152.5°	253.2	257.5	262.0	263.1	272.2	284.5	290.6	298.5	314.3	326.3	327.8
155°	262.3	265.5	268.8	269.6	276.6	285.9	290.6	296.9	309.5	319.0	320.0
157.5°	269.0	272.1	275.3	276.1	280.9	287.3	290.6	295.5	305.3	312.7	313.4
160°	273.5	276.0	278.4	279.0	282.9	288.0	290.6	294.8	303.2	309.5	309.9
162.5°	278.1	279.9	281.7	282.2	285.0	288.7	290.6	294.1	301.2	306.5	306.9
165°	283.1	284.8	286.4	286.8	288.1	289.8	290.6	293.1	298.2	302.0	302.4
167.5°	287.6	288.4	289.2	289.4	290.5	291.9	292.5	294.2	297.6	300.0	300.2
170°	290.6	291.4	292.2	292.3	292.4	292.5	292.5	294.2	297.6	300.0	300.0
172.5°	292.2	292.3	292.5	292.5	292.5	292.5	292.5	293.8	296.5	298.5	298.3
175°	294.3	294.3	294.3	294.3	293.7	292.9	292.5	293.3	295.0	296.3	296.3
177.5°	294.3	294.3	294.3	294.3	293.8	293.2	292.9	293.6	294.9	295.9	295.7
180°	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1037.9	1037.9
2.5°	1108.0	1101.3
5°	1425.0	1431.7
7.5°	1918.9	1915.6
10°	2386.1	2416.2
12.5°	2726.5	2733.2
15°	2933.4	2946.8
17.5°	3013.5	3016.9
20°	3016.9	3010.2
22.5°	2980.2	2973.5
25°	2936.8	2933.4
27.5°	2896.7	2900.0
30°	2880.0	2890.1
32.5°	2880.0	2896.7
35°	2886.7	2903.4
37.5°	2883.4	2903.4
40°	2870.0	2893.4
42.5°	2833.3	2850.0
45°	2776.6	2796.6
47.5°	2703.1	2716.5
50°	2609.7	2623.1
52.5°	2492.9	2496.3
55°	2352.7	2366.1
57.5°	2202.5	2205.9
60°	2035.7	2045.8
62.5°	1858.8	1858.8
65°	1672.0	1678.7
67.5°	1478.4	1495.1
70°	1281.5	1284.9
72.5°	1088.0	1088.0
75°	887.7	891.0
77.5°	697.5	697.5
80°	517.3	520.6
82.5°	357.1	363.7
85°	223.6	223.6
87.5°	103.4	93.5
90°	7.5	7.5
92.5°	30.1	24.1
95°	104.8	86.7
97.5°	251.0	216.6
100°	361.8	320.7
102.5°	470.6	435.5
105°	609.4	590.5
107.5°	700.4	704.9
110°	735.0	754.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	738.1	768.3
115°	718.6	760.4
117.5°	677.1	723.5
120°	643.6	688.7
122.5°	611.0	655.5
125°	564.6	605.6
127.5°	522.8	557.4
130°	498.1	530.1
132.5°	475.8	504.4
135°	445.2	469.8
137.5°	420.6	440.8
140°	403.8	422.7
142.5°	389.9	406.0
145°	369.0	381.2
147.5°	352.8	363.0
150°	342.7	351.0
152.5°	334.1	340.3
155°	324.1	328.2
157.5°	316.3	319.2
160°	311.6	313.3
162.5°	308.5	310.1
165°	304.1	305.8
167.5°	300.9	301.6
170°	300.0	300.0
172.5°	297.7	297.1
175°	296.3	296.3
177.5°	295.0	294.3
180°	294.3	294.3



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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	8.89	10.19	9.52	10.84	11.59	22.07	23.37	22.70	24.02	24.77
	3H	9.63	10.80	10.27	11.46	12.25	23.94	25.12	24.58	25.78	26.56
	4H	9.94	11.06	10.61	11.73	12.52	24.60	25.72	25.27	26.39	27.18
	6H	10.22	11.25	10.90	11.93	12.74	25.06	26.09	25.74	26.77	27.58
	8H	10.30	11.28	10.99	11.99	12.80	25.19	26.18	25.88	26.88	27.69
	12H	10.33	11.27	11.03	11.97	12.81	25.27	26.22	25.97	26.91	27.76
4H	2H	16.16	17.27	16.82	17.94	18.74	22.39	23.51	23.06	24.18	24.97
	3H	17.76	18.70	18.44	19.41	20.22	24.48	25.41	25.16	26.12	26.94
	4H	17.88	18.73	18.57	19.44	20.29	25.26	26.12	25.96	26.83	27.67
	6H	17.91	18.66	18.63	19.39	20.25	25.83	26.57	26.55	27.31	28.16
	8H	17.90	18.60	18.62	19.33	20.20	26.00	26.70	26.73	27.43	28.30
	12H	17.88	18.51	18.62	19.27	20.14	26.12	26.75	26.86	27.51	28.38
8H	4H	19.36	20.05	20.08	20.79	21.66	25.36	26.06	26.08	26.79	27.66
	6H	19.62	20.20	20.37	20.98	21.85	26.01	26.59	26.77	27.37	28.24
	8H	19.65	20.16	20.41	20.94	21.83	26.24	26.76	27.00	27.53	28.42
	12H	19.64	20.09	20.40	20.86	21.80	26.41	26.86	27.17	27.63	28.57
12H	4H	19.53	20.15	20.27	20.91	21.78	25.34	25.96	26.08	26.72	27.60
	6H	19.89	20.40	20.65	21.18	22.07	26.00	26.52	26.77	27.30	28.18
	8H	19.98	20.43	20.75	21.20	22.15	26.25	26.71	27.02	27.48	28.42