

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: P936569

Luminaire Tested: SQ4-FB-025U-125D-935-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

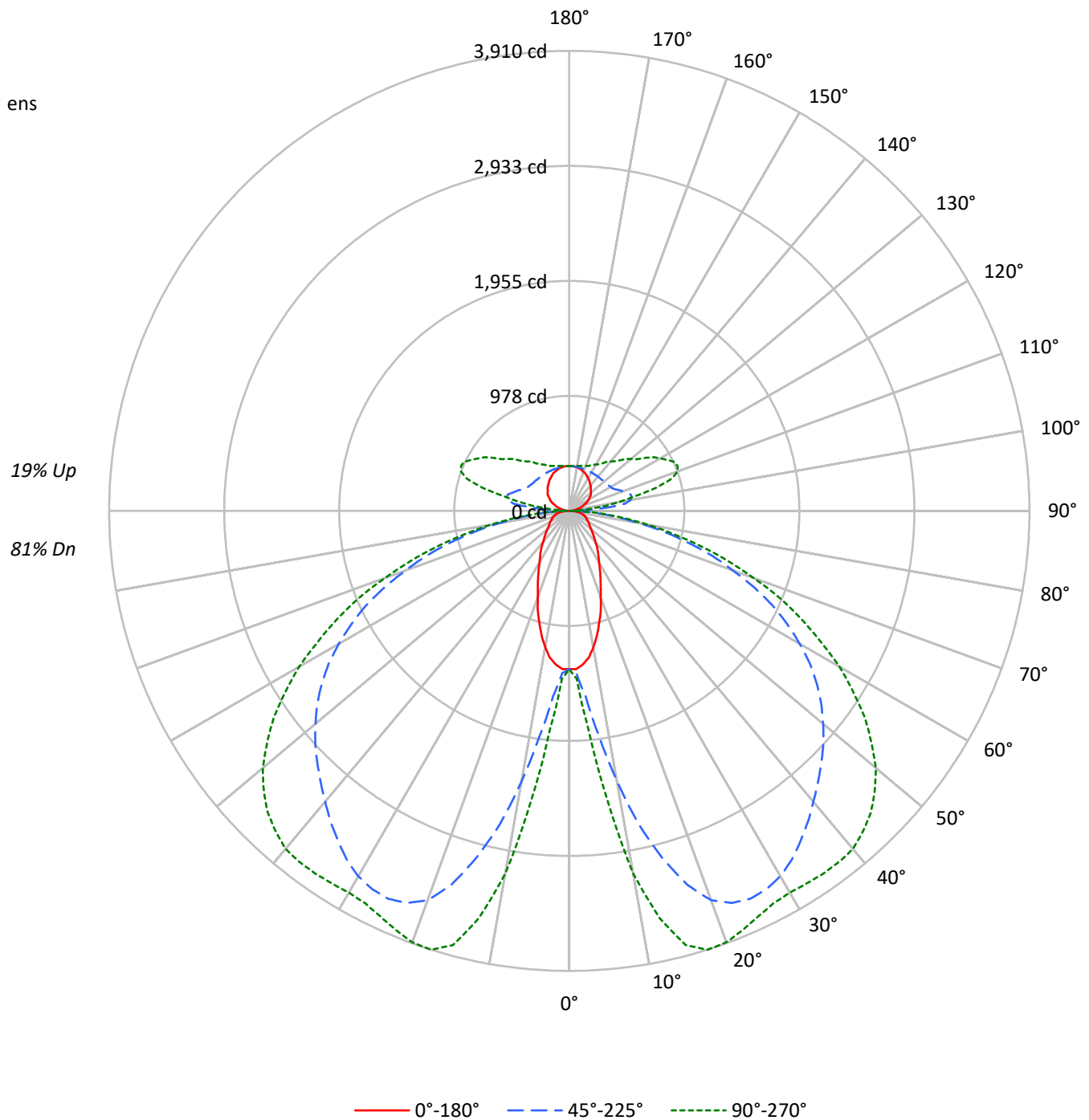
Test Method: LM-79-2019  
Report Number: P936569  
REPORT IS A COMBINATION OF REPORTS P933432 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12880.5 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 148.8  
Input Voltage (V): NR  
Input Current (Ain): 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				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°	4161	4161	4161
5°	4066	4810	5593
10°	3690	7013	9272
15°	3137	9165	11196
20°	2555	10623	11410
25°	2132	11120	11178
30°	1799	11193	11157
35°	1591	11010	11445
40°	1387	10771	11744
45°	1257	10598	11790
50°	1154	10442	11595
55°	1106	10213	11081
60°	1134	9769	10269
65°	1182	9092	9154
70°	1262	7934	7733
75°	1404	6475	6035
80°	1544	4496	4067
85°	1403	2389	2081

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11790 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.0	1.4
10°-20°	771.2	6.0
20°-30°	1348.9	10.5
30°-40°	1736.5	13.5
40°-50°	1939.6	15.1
50°-60°	1857.7	14.4
60°-70°	1472.2	11.4
70°-80°	865.7	6.7
80°-90°	242.0	1.9
90°-100°	185.9	1.4
100°-110°	488.8	3.8
110°-120°	506.9	3.9
120°-130°	406.6	3.2
130°-140°	319.0	2.5
140°-150°	244.9	1.9
150°-160°	176.3	1.4
160°-170°	107.9	0.8
170°-180°	36.5	0.3
0°-30°	2294.1	17.8
0°-40°	4030.6	31.3
0°-60°	7827.9	60.8
0°-90°	10407.8	80.8
90°-120°	1181.6	9.2
90°-150°	2152.0	16.7
90°-180°	2473.0	19.2
0°-180°	12880.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1345	1345	1345	1345	1345	
5°	1310	1406	1583	1791	1856	121
15°	982	1812	3054	3702	3819	273
25°	627	2054	3638	3798	3802	289
35°	424	1964	3426	3620	3763	265
45°	290	1566	3028	3469	3625	224
55°	208	995	2569	2984	3067	189
65°	164	528	1908	2145	2176	163
75°	121	324	1047	1150	1155	127
85°	43	100	260	286	290	46
90°	3	7	19	10	10	5
95°	24	96	320	165	112	27
105°	88	133	540	820	765	93
115°	156	190	433	864	986	154
125°	218	244	394	665	785	193
135°	259	285	381	537	609	201
145°	301	320	377	458	494	188
155°	340	349	377	414	426	156
165°	367	372	377	391	396	104
175°	381	381	379	384	384	36
180°	381	381	381	381	381	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1345.2	1345.2	1345.2	1345.2	1345.2	1345.2	1345.2	1345.2	1345.2	1345.2	1345.2
2.5°	1345.2	1345.2	1353.8	1358.2	1366.8	1371.1	1379.8	1388.4	1414.4	1418.8	1427.4
5°	1310.5	1327.8	1384.1	1405.7	1466.3	1548.5	1583.1	1639.3	1756.1	1790.7	1812.3
7.5°	1258.7	1297.6	1436.0	1470.6	1622.0	1838.3	1929.1	2050.3	2236.2	2327.1	2400.6
10°	1176.5	1258.7	1505.2	1587.4	1833.9	2162.6	2331.3	2500.0	2781.2	2906.6	2954.2
12.5°	1085.7	1219.7	1578.8	1691.2	2045.9	2526.0	2729.3	2915.3	3235.4	3404.1	3430.0
15°	981.8	1163.5	1647.9	1812.3	2270.8	2828.8	3053.7	3282.9	3581.4	3702.5	3732.8
17.5°	891.0	1120.3	1712.9	1885.8	2443.8	3101.3	3330.6	3520.8	3763.0	3845.2	3866.9
20°	778.6	1051.0	1756.1	1981.0	2625.5	3300.2	3520.8	3667.9	3832.3	3884.2	3892.8
22.5°	696.3	977.5	1782.0	2015.6	2746.6	3421.4	3607.4	3724.1	3836.6	3853.9	3858.2
25°	627.2	895.4	1777.7	2054.5	2850.4	3494.9	3637.6	3724.1	3789.0	3797.6	3797.6
27.5°	562.3	804.5	1760.4	2063.2	2928.2	3512.2	3624.7	3685.2	3715.5	3732.8	3732.8
30°	506.1	718.0	1717.1	2045.9	2962.8	3494.9	3585.7	3616.0	3646.3	3672.2	3685.2
32.5°	462.8	635.8	1652.3	2011.3	2967.2	3451.6	3516.5	3533.8	3577.0	3637.6	3659.3
35°	423.9	553.6	1578.8	1963.7	2941.3	3382.4	3425.6	3443.0	3529.5	3620.3	3650.6
37.5°	384.9	493.1	1483.6	1881.6	2902.3	3300.2	3330.6	3360.8	3494.9	3603.0	3637.6
40°	346.0	441.2	1371.1	1790.7	2841.8	3200.8	3226.7	3274.3	3451.6	3577.0	3611.6
42.5°	315.8	398.0	1250.1	1695.6	2763.9	3088.3	3127.3	3196.4	3399.7	3533.8	3572.8
45°	289.8	354.7	1120.3	1565.8	2664.4	2971.5	3027.8	3122.9	3339.2	3468.9	3503.5
47.5°	263.9	324.4	986.2	1431.7	2556.3	2854.7	2928.2	3036.4	3257.0	3382.4	3412.7
50°	242.2	294.1	852.1	1289.0	2439.5	2729.3	2815.8	2928.2	3153.2	3270.0	3308.9
52.5°	224.9	268.2	726.7	1146.2	2305.4	2599.5	2699.1	2815.8	3027.8	3140.2	3166.1
55°	207.6	246.6	618.6	994.8	2167.0	2461.1	2569.3	2681.8	2889.3	2984.5	3001.8
57.5°	198.9	229.3	527.7	852.1	2019.9	2305.4	2426.5	2530.4	2725.0	2798.5	2815.8
60°	186.0	216.2	458.5	731.0	1859.9	2158.4	2262.1	2366.0	2530.4	2590.8	2603.9
62.5°	173.0	207.6	406.6	614.2	1695.6	1985.3	2089.1	2184.3	2322.7	2366.0	2383.3
65°	164.4	198.9	367.6	527.7	1526.9	1803.7	1907.5	1989.7	2102.1	2145.3	2154.0
67.5°	155.7	190.3	337.4	454.2	1358.2	1622.0	1699.8	1777.7	1864.3	1907.5	1911.8
70°	142.7	181.6	311.4	402.2	1185.1	1414.4	1479.2	1561.5	1630.6	1652.3	1665.2
72.5°	134.1	168.7	294.1	363.3	1007.8	1215.5	1276.0	1323.6	1384.1	1405.7	1405.7
75°	121.1	151.4	276.8	324.4	826.1	994.8	1046.8	1094.3	1141.9	1150.5	1137.6
77.5°	108.1	134.1	237.9	272.5	644.5	787.2	830.4	856.4	895.4	904.0	908.3
80°	90.8	116.8	186.0	212.0	467.2	579.6	609.9	631.5	666.1	666.1	674.8
82.5°	69.2	90.8	134.1	151.4	315.8	398.0	423.9	436.8	458.5	458.5	458.5
85°	43.3	56.2	86.5	99.5	190.3	242.2	259.5	263.9	281.2	285.5	285.5
87.5°	21.6	30.2	56.2	60.6	99.5	125.4	125.4	134.1	134.1	129.8	125.4
90°	2.6	4.6	6.6	7.2	11.2	16.7	19.4	17.3	13.0	9.7	9.7
92.5°	10.2	27.6	45.1	49.4	69.4	96.2	109.6	96.0	68.9	48.6	46.7
95°	24.5	56.4	88.3	96.3	170.9	270.5	320.3	285.8	216.8	165.1	159.2
97.5°	42.5	70.6	98.7	105.7	230.2	396.3	479.2	457.4	413.9	381.2	370.0
100°	56.3	81.8	107.3	113.7	251.9	436.1	528.2	529.8	532.9	535.3	522.0
102.5°	68.1	91.8	115.6	121.6	261.7	448.6	542.0	569.7	625.2	666.9	655.4
105°	88.1	108.2	128.3	133.3	269.1	449.9	540.4	602.6	727.1	820.5	814.3
107.5°	108.5	127.3	146.1	150.8	270.4	429.9	509.7	596.5	770.1	900.4	901.8
110°	122.3	139.3	156.3	160.5	268.4	412.2	484.1	581.1	775.2	920.8	927.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	136.0	152.1	168.3	172.3	268.5	396.7	460.8	560.2	758.8	907.8	917.6
115°	156.4	171.3	186.2	190.0	270.9	378.9	432.9	528.6	719.9	863.5	877.0
117.5°	176.6	190.2	203.7	207.1	276.0	367.8	413.7	500.1	672.8	802.3	817.4
120°	188.4	201.2	213.9	217.1	280.1	364.0	406.0	484.9	642.7	761.1	775.7
122.5°	200.0	212.8	225.6	228.8	285.9	362.0	400.1	471.2	613.3	719.9	734.3
125°	217.6	229.4	241.1	244.0	293.9	360.5	393.7	454.0	574.8	665.3	678.6
127.5°	231.9	243.8	255.6	258.6	301.9	359.5	388.3	440.1	543.8	621.5	632.8
130°	239.6	252.4	265.1	268.3	307.7	360.1	386.3	432.5	524.7	593.9	604.3
132.5°	247.6	260.3	273.1	276.2	312.3	360.5	384.5	425.8	508.5	570.4	579.7
135°	259.3	270.9	282.5	285.4	317.5	360.1	381.4	416.0	485.2	537.1	545.1
137.5°	271.4	282.9	294.3	297.2	325.1	362.4	380.9	410.2	468.6	512.5	519.0
140°	281.3	291.9	302.5	305.2	329.8	362.7	379.1	404.4	454.9	492.8	498.9
142.5°	289.0	298.8	308.6	311.1	333.7	364.0	379.1	401.3	445.7	479.0	484.3
145°	300.8	309.4	317.9	320.0	338.8	364.0	376.6	394.7	431.0	458.2	462.2
147.5°	312.6	320.9	329.2	331.3	346.3	366.5	376.6	390.9	419.4	440.8	444.1
150°	320.3	327.8	335.3	337.1	350.3	367.8	376.6	388.7	412.8	430.9	433.5
152.5°	328.2	333.9	339.5	341.0	352.8	368.7	376.6	386.9	407.5	422.9	425.0
155°	339.9	344.1	348.4	349.4	358.4	370.5	376.6	384.8	401.2	413.5	414.8
157.5°	348.6	352.7	356.9	357.9	364.1	372.4	376.6	383.0	395.7	405.2	406.1
160°	354.6	357.8	361.0	361.8	366.7	373.3	376.6	382.0	392.9	401.1	401.6
162.5°	360.5	362.9	365.3	365.8	369.4	374.2	376.6	381.2	390.4	397.3	397.8
165°	366.9	369.0	371.2	371.7	373.3	375.5	376.6	379.9	386.5	391.4	391.9
167.5°	372.8	373.8	374.8	375.1	376.4	378.2	379.1	381.3	385.6	388.9	389.1
170°	376.6	377.6	378.6	378.9	379.0	379.1	379.1	381.3	385.6	388.9	388.9
172.5°	378.6	378.9	379.1	379.1	379.1	379.1	379.1	380.8	384.3	386.8	386.6
175°	381.4	381.4	381.4	381.4	380.7	379.7	379.1	380.2	382.4	384.0	384.0
177.5°	381.4	381.4	381.4	381.4	380.8	380.1	379.7	380.5	382.2	383.5	383.2
180°	381.4	381.4	381.4	381.4	381.4	381.4	381.4	381.4	381.4	381.4	381.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1345.2	1345.2
2.5°	1436.0	1427.4
5°	1847.0	1855.6
7.5°	2487.1	2482.7
10°	3092.6	3131.5
12.5°	3533.8	3542.4
15°	3802.0	3819.3
17.5°	3905.8	3910.1
20°	3910.1	3901.5
22.5°	3862.5	3853.9
25°	3806.3	3802.0
27.5°	3754.4	3758.8
30°	3732.8	3745.7
32.5°	3732.8	3754.4
35°	3741.4	3763.0
37.5°	3737.1	3763.0
40°	3719.8	3750.1
42.5°	3672.2	3693.8
45°	3598.7	3624.7
47.5°	3503.5	3520.8
50°	3382.4	3399.7
52.5°	3231.0	3235.4
55°	3049.4	3066.7
57.5°	2854.7	2859.1
60°	2638.5	2651.4
62.5°	2409.2	2409.2
65°	2167.0	2175.7
67.5°	1916.1	1937.8
70°	1661.0	1665.2
72.5°	1410.1	1410.1
75°	1150.5	1154.9
77.5°	904.0	904.0
80°	670.4	674.8
82.5°	462.8	471.5
85°	289.8	289.8
87.5°	134.1	121.1
90°	9.7	9.7
92.5°	39.0	31.3
95°	135.8	112.4
97.5°	325.5	280.8
100°	468.9	415.8
102.5°	609.9	564.4
105°	789.9	765.4
107.5°	907.8	913.7
110°	952.7	978.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	956.7	995.8
115°	931.3	985.6
117.5°	877.6	937.7
120°	834.2	892.6
122.5°	792.0	849.7
125°	731.7	784.9
127.5°	677.6	722.4
130°	645.7	687.1
132.5°	616.8	653.8
135°	577.1	609.0
137.5°	545.2	571.4
140°	523.4	547.8
142.5°	505.3	526.4
145°	478.1	494.1
147.5°	457.4	470.6
150°	444.2	454.9
152.5°	433.0	441.1
155°	420.1	425.5
157.5°	410.0	413.7
160°	403.8	406.0
162.5°	399.8	401.9
165°	394.1	396.3
167.5°	390.0	390.9
170°	388.9	388.9
172.5°	385.8	385.0
175°	384.0	384.0
177.5°	382.4	381.4
180°	381.4	381.4



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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	8.39	9.69	9.02	10.34	11.09	21.58	22.88	22.21	23.53	24.28
	3H	9.12	10.30	9.77	10.96	11.74	23.46	24.63	24.10	25.29	26.08
	4H	9.44	10.55	10.11	11.23	12.02	24.12	25.24	24.79	25.91	26.70
	6H	9.71	10.75	10.39	11.43	12.24	24.58	25.61	25.26	26.30	27.11
	8H	9.80	10.78	10.48	11.48	12.30	24.72	25.70	25.41	26.41	27.22
	12H	9.83	10.77	10.52	11.47	12.31	24.80	25.74	25.50	26.44	27.28
4H	2H	15.66	16.78	16.33	17.45	18.24	21.90	23.02	22.57	23.69	24.48
	3H	17.27	18.20	17.95	18.91	19.73	23.99	24.93	24.67	25.64	26.45
	4H	17.38	18.23	18.08	18.95	19.79	24.78	25.64	25.48	26.35	27.19
	6H	17.42	18.16	18.13	18.90	19.75	25.35	26.10	26.07	26.83	27.69
	8H	17.41	18.10	18.13	18.84	19.70	25.53	26.22	26.25	26.96	27.83
	12H	17.39	18.01	18.13	18.77	19.64	25.65	26.28	26.39	27.03	27.91
8H	4H	18.87	19.56	19.59	20.30	21.16	24.88	25.58	25.60	26.31	27.18
	6H	19.13	19.71	19.88	20.49	21.35	25.54	26.11	26.29	26.89	27.76
	8H	19.15	19.67	19.92	20.45	21.33	25.77	26.28	26.53	27.06	27.94
	12H	19.14	19.60	19.91	20.37	21.31	25.93	26.39	26.70	27.16	28.10
12H	4H	19.03	19.66	19.78	20.42	21.29	24.86	25.48	25.60	26.24	27.11
	6H	19.40	19.91	20.16	20.69	21.58	25.52	26.04	26.29	26.82	27.70
	8H	19.49	19.94	20.26	20.71	21.66	25.78	26.24	26.55	27.00	27.95