

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: P936573

Luminaire Tested: SQ4-FB-025U-125D-940-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

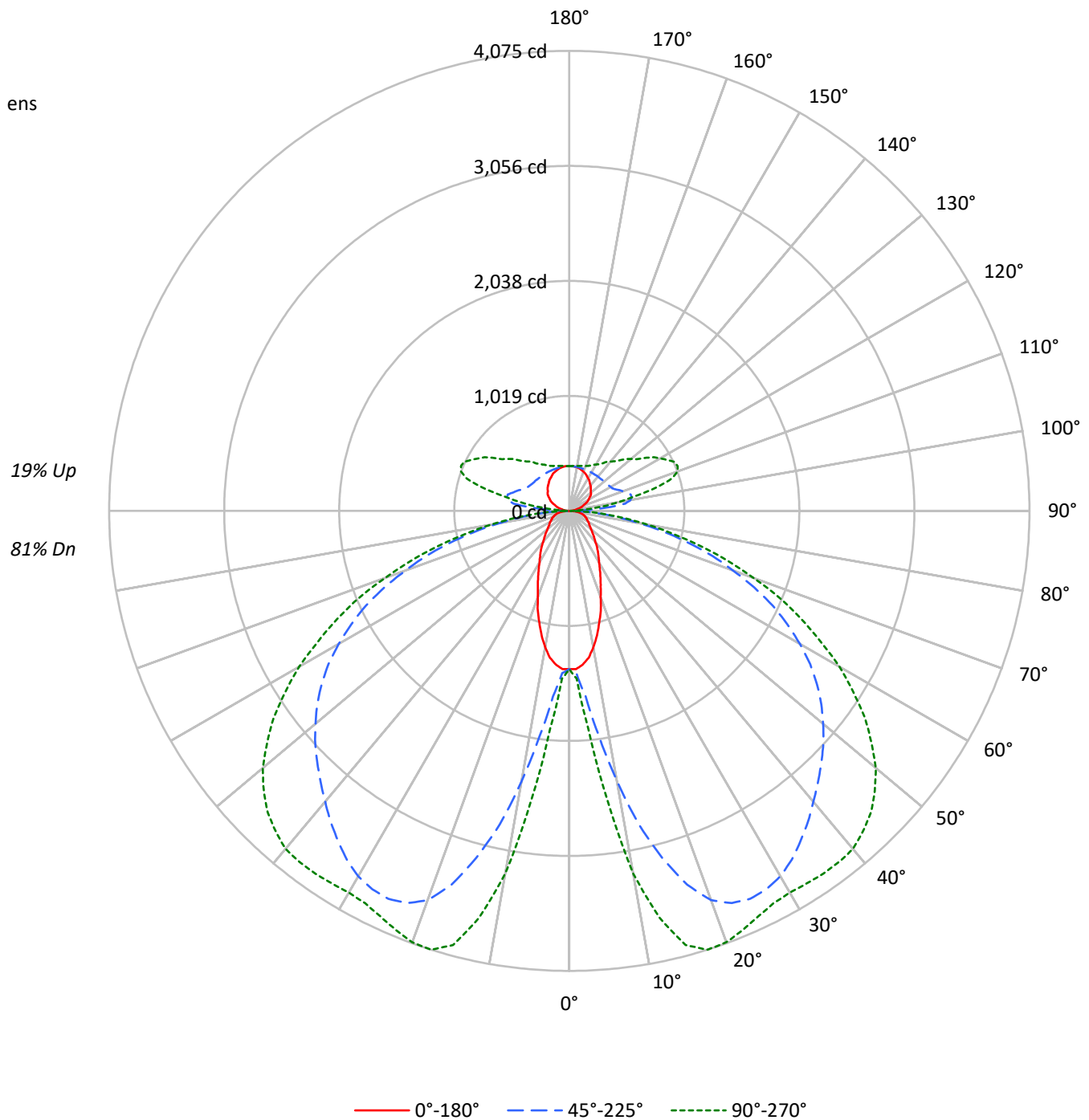
Test Method: LM-79-2019  
Report Number: P936573  
REPORT IS A COMBINATION OF REPORTS P933432 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13424.8 lumens  
Efficiency: N/A  
Efficacy: 90.2 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°	4337	4337	4337
5°	4238	5014	5829
10°	3846	7310	9663
15°	3270	9552	11669
20°	2663	11072	11892
25°	2222	11590	11650
30°	1875	11666	11628
35°	1659	11475	11929
40°	1446	11226	12240
45°	1310	11046	12288
50°	1203	10883	12085
55°	1153	10645	11549
60°	1182	10181	10703
65°	1232	9476	9541
70°	1315	8269	8060
75°	1463	6749	6290
80°	1611	4686	4239
85°	1461	2491	2169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12288 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.4	1.4
10°-20°	803.8	6.0
20°-30°	1405.9	10.5
30°-40°	1809.9	13.5
40°-50°	2021.6	15.1
50°-60°	1936.2	14.4
60°-70°	1534.4	11.4
70°-80°	902.3	6.7
80°-90°	252.2	1.9
90°-100°	193.8	1.4
100°-110°	509.5	3.8
110°-120°	528.3	3.9
120°-130°	423.7	3.2
130°-140°	332.5	2.5
140°-150°	255.2	1.9
150°-160°	183.8	1.4
160°-170°	112.5	0.8
170°-180°	38.0	0.3
0°-30°	2391.1	17.8
0°-40°	4200.9	31.3
0°-60°	8158.7	60.8
0°-90°	10847.6	80.8
90°-120°	1231.6	9.2
90°-150°	2243.0	16.7
90°-180°	2577.0	19.2
0°-180°	13424.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1402	1402	1402	1402	1402	
5°	1366	1465	1650	1866	1934	126
15°	1023	1889	3183	3859	3981	285
25°	654	2141	3791	3958	3963	301
35°	442	2047	3570	3773	3922	276
45°	302	1632	3156	3616	3778	234
55°	216	1037	2678	3111	3196	197
65°	171	550	1988	2236	2268	170
75°	126	338	1091	1199	1204	132
85°	45	104	270	298	302	48
90°	3	8	20	10	10	5
95°	26	100	334	172	117	28
105°	92	139	563	855	798	97
115°	163	198	451	900	1027	161
125°	227	254	410	693	818	201
135°	270	298	398	560	635	209
145°	314	334	392	478	515	196
155°	354	364	392	431	444	163
165°	382	387	392	408	413	108
175°	398	398	395	400	400	38
180°	398	398	398	398	398	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1
2.5°	1402.1	1402.1	1411.0	1415.6	1424.5	1429.1	1438.1	1447.1	1474.2	1478.7	1487.7
5°	1365.9	1383.9	1442.6	1465.1	1528.2	1613.9	1650.0	1708.6	1830.3	1866.4	1888.9
7.5°	1311.8	1352.4	1496.7	1532.8	1690.6	1915.9	2010.6	2136.9	2330.7	2425.4	2502.0
10°	1226.2	1311.8	1568.8	1654.4	1911.4	2254.0	2429.8	2605.7	2898.7	3029.4	3079.1
12.5°	1131.6	1271.3	1645.5	1762.7	2132.4	2632.7	2844.6	3038.5	3372.1	3547.9	3574.9
15°	1023.3	1212.7	1717.6	1888.9	2366.8	2948.3	3182.7	3421.6	3732.7	3859.0	3890.5
17.5°	928.7	1167.6	1785.2	1965.5	2547.1	3232.3	3471.3	3669.6	3922.0	4007.7	4030.3
20°	811.5	1095.4	1830.3	2064.7	2736.5	3439.7	3669.6	3822.8	3994.2	4048.3	4057.3
22.5°	725.8	1018.8	1857.3	2100.7	2862.6	3565.9	3759.8	3881.4	3998.7	4016.7	4021.2
25°	653.7	933.2	1852.8	2141.3	2970.8	3642.6	3791.3	3881.4	3949.1	3958.1	3958.1
27.5°	586.1	838.5	1834.8	2150.4	3052.0	3660.6	3777.8	3840.9	3872.5	3890.5	3890.5
30°	527.5	748.3	1789.7	2132.4	3088.0	3642.6	3737.2	3768.8	3800.4	3827.4	3840.9
32.5°	482.4	662.7	1722.1	2096.3	3092.5	3597.5	3665.1	3683.2	3728.2	3791.3	3813.9
35°	441.8	577.0	1645.5	2046.7	3065.6	3525.4	3570.4	3588.5	3678.6	3773.3	3804.8
37.5°	401.2	513.9	1546.3	1961.1	3025.0	3439.7	3471.3	3502.8	3642.6	3755.3	3791.3
40°	360.6	459.8	1429.1	1866.4	2961.8	3336.0	3363.0	3412.7	3597.5	3728.2	3764.2
42.5°	329.1	414.8	1302.9	1767.2	2880.7	3218.8	3259.4	3331.5	3543.4	3683.2	3723.7
45°	302.0	369.7	1167.6	1632.0	2777.0	3097.1	3155.7	3254.9	3480.2	3615.5	3651.5
47.5°	275.0	338.2	1027.9	1492.2	2664.3	2975.3	3052.0	3164.7	3394.6	3525.4	3556.9
50°	252.5	306.5	888.1	1343.5	2542.6	2844.6	2934.8	3052.0	3286.4	3408.1	3448.7
52.5°	234.4	279.5	757.4	1194.6	2402.8	2709.4	2813.1	2934.8	3155.7	3272.9	3299.9
55°	216.4	257.0	644.7	1036.8	2258.5	2565.1	2677.9	2795.1	3011.4	3110.6	3128.6
57.5°	207.3	239.0	550.0	888.1	2105.3	2402.8	2529.0	2637.3	2840.1	2916.7	2934.8
60°	193.9	225.4	477.8	761.9	1938.5	2249.6	2357.7	2466.0	2637.3	2700.3	2713.9
62.5°	180.4	216.4	423.8	640.2	1767.2	2069.2	2177.4	2276.6	2420.9	2466.0	2484.0
65°	171.3	207.3	383.2	550.0	1591.4	1879.9	1988.1	2073.7	2191.0	2236.0	2245.0
67.5°	162.3	198.4	351.6	473.4	1415.6	1690.6	1771.6	1852.8	1943.0	1988.1	1992.6
70°	148.7	189.3	324.6	419.2	1235.2	1474.2	1541.7	1627.4	1699.5	1722.1	1735.6
72.5°	139.8	175.8	306.5	378.6	1050.4	1266.8	1329.9	1379.5	1442.6	1465.1	1465.1
75°	126.2	157.8	288.5	338.2	861.0	1036.8	1091.0	1140.5	1190.1	1199.2	1185.7
77.5°	112.7	139.8	247.9	284.0	671.7	820.5	865.5	892.6	933.2	942.2	946.7
80°	94.7	121.7	193.9	220.9	486.9	604.1	635.6	658.2	694.2	694.2	703.3
82.5°	72.1	94.7	139.8	157.8	329.1	414.8	441.8	455.3	477.8	477.8	477.8
85°	45.1	58.6	90.1	103.7	198.4	252.5	270.5	275.0	293.0	297.6	297.6
87.5°	22.6	31.5	58.6	63.1	103.7	130.7	130.7	139.8	139.8	135.2	130.7
90°	2.7	4.8	6.9	7.5	11.7	17.4	20.2	18.0	13.5	10.1	10.1
92.5°	10.7	28.8	47.0	51.5	72.4	100.3	114.2	100.1	71.8	50.7	48.7
95°	25.6	58.8	92.0	100.3	178.1	281.9	333.8	297.8	226.0	172.1	166.0
97.5°	44.3	73.6	102.9	110.2	239.9	413.0	499.5	476.8	431.4	397.3	385.7
100°	58.7	85.2	111.8	118.5	262.5	454.5	550.5	552.2	555.4	557.9	544.1
102.5°	71.0	95.7	120.5	126.7	272.8	467.5	564.9	593.8	651.6	695.0	683.1
105°	91.8	112.8	133.7	139.0	280.4	469.0	563.3	628.1	757.8	855.1	848.8
107.5°	113.1	132.7	152.3	157.2	281.9	448.1	531.2	621.7	802.7	938.4	939.9
110°	127.5	145.2	162.9	167.3	279.7	429.6	504.6	605.7	808.0	959.8	966.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	141.7	158.5	175.4	179.6	279.8	413.5	480.3	583.9	790.9	946.2	956.4
115°	163.0	178.6	194.1	198.0	282.4	394.9	451.2	550.9	750.4	900.0	914.1
117.5°	184.1	198.2	212.3	215.9	287.6	383.3	431.2	521.3	701.3	836.2	851.9
120°	196.3	209.7	223.0	226.3	291.9	379.4	423.1	505.4	669.9	793.3	808.5
122.5°	208.4	221.8	235.1	238.5	298.0	377.3	417.0	491.1	639.2	750.3	765.3
125°	226.8	239.0	251.3	254.3	306.4	375.7	410.3	473.2	599.0	693.4	707.3
127.5°	241.7	254.1	266.4	269.5	314.6	374.7	404.8	458.7	566.8	647.8	659.5
130°	249.7	263.0	276.3	279.6	320.7	375.3	402.6	450.7	546.9	619.0	629.9
132.5°	258.1	271.3	284.6	287.9	325.5	375.7	400.8	443.8	530.0	594.5	604.2
135°	270.3	282.4	294.5	297.5	330.9	375.4	397.6	433.6	505.7	559.8	568.1
137.5°	282.8	294.8	306.7	309.7	338.9	377.7	397.0	427.5	488.4	534.1	541.0
140°	293.2	304.2	315.3	318.1	343.7	378.0	395.2	421.4	474.1	513.6	520.0
142.5°	301.2	311.4	321.6	324.2	347.8	379.4	395.2	418.2	464.5	499.2	504.7
145°	313.6	322.4	331.3	333.5	353.2	379.4	392.5	411.4	449.2	477.6	481.7
147.5°	325.8	334.4	343.1	345.3	361.0	382.0	392.5	407.4	437.2	459.5	462.9
150°	333.8	341.6	349.4	351.4	365.1	383.3	392.5	405.1	430.2	449.1	451.8
152.5°	342.1	348.0	353.9	355.4	367.7	384.2	392.5	403.2	424.7	440.8	442.9
155°	354.3	358.7	363.1	364.2	373.6	386.2	392.5	401.0	418.2	430.9	432.4
157.5°	363.4	367.6	372.0	373.0	379.5	388.1	392.5	399.2	412.4	422.3	423.3
160°	369.6	372.9	376.2	377.0	382.2	389.0	392.5	398.2	409.5	418.1	418.6
162.5°	375.7	378.2	380.7	381.3	385.0	390.0	392.5	397.3	406.9	414.1	414.6
165°	382.4	384.6	386.9	387.4	389.1	391.3	392.5	396.0	402.8	407.9	408.5
167.5°	388.5	389.6	390.6	390.9	392.3	394.2	395.2	397.4	401.9	405.3	405.5
170°	392.5	393.6	394.6	394.9	395.0	395.1	395.2	397.4	401.9	405.3	405.3
172.5°	394.6	394.9	395.1	395.2	395.2	395.2	395.2	396.9	400.5	403.2	403.0
175°	397.6	397.6	397.6	397.6	396.8	395.7	395.2	396.3	398.5	400.2	400.2
177.5°	397.6	397.6	397.6	397.6	396.9	396.1	395.7	396.6	398.4	399.7	399.4
180°	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6

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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1402.1	1402.1
2.5°	1496.7	1487.7
5°	1925.0	1934.0
7.5°	2592.2	2587.6
10°	3223.3	3263.8
12.5°	3683.2	3692.1
15°	3962.6	3980.6
17.5°	4070.9	4075.3
20°	4075.3	4066.3
22.5°	4025.7	4016.7
25°	3967.1	3962.6
27.5°	3913.1	3917.6
30°	3890.5	3904.0
32.5°	3890.5	3913.1
35°	3899.5	3922.0
37.5°	3895.0	3922.0
40°	3877.0	3908.5
42.5°	3827.4	3849.9
45°	3750.7	3777.8
47.5°	3651.5	3669.6
50°	3525.4	3543.4
52.5°	3367.6	3372.1
55°	3178.2	3196.3
57.5°	2975.3	2979.9
60°	2750.0	2763.5
62.5°	2511.0	2511.0
65°	2258.5	2267.6
67.5°	1997.1	2019.7
70°	1731.2	1735.6
72.5°	1469.6	1469.6
75°	1199.2	1203.7
77.5°	942.2	942.2
80°	698.8	703.3
82.5°	482.4	491.4
85°	302.0	302.0
87.5°	139.8	126.2
90°	10.1	10.1
92.5°	40.7	32.6
95°	141.5	117.1
97.5°	339.2	292.7
100°	488.8	433.3
102.5°	635.7	588.3
105°	823.3	797.8
107.5°	946.2	952.3
110°	993.0	1019.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	997.1	1037.9
115°	970.7	1027.2
117.5°	914.6	977.3
120°	869.4	930.4
122.5°	825.5	885.6
125°	762.6	818.0
127.5°	706.2	752.9
130°	673.0	716.2
132.5°	642.8	681.5
135°	601.4	634.7
137.5°	568.2	595.6
140°	545.5	571.0
142.5°	526.7	548.6
145°	498.3	515.0
147.5°	476.7	490.4
150°	463.0	474.1
152.5°	451.3	459.7
155°	437.9	443.5
157.5°	427.3	431.2
160°	420.9	423.1
162.5°	416.7	418.9
165°	410.8	413.0
167.5°	406.4	407.4
170°	405.3	405.3
172.5°	402.1	401.3
175°	400.2	400.2
177.5°	398.5	397.6
180°	397.6	397.6



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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	8.53	9.83	9.16	10.49	11.23	21.72	23.03	22.35	23.68	24.42
	3H	9.27	10.45	9.91	11.11	11.89	23.60	24.78	24.24	25.44	26.22
	4H	9.59	10.70	10.25	11.37	12.17	24.27	25.38	24.93	26.05	26.85
	6H	9.86	10.89	10.54	11.57	12.38	24.73	25.76	25.40	26.44	27.25
	8H	9.94	10.92	10.63	11.63	12.44	24.86	25.85	25.55	26.55	27.36
	12H	9.97	10.91	10.67	11.61	12.45	24.95	25.89	25.64	26.59	27.43
4H	2H	15.81	16.92	16.47	17.59	18.39	22.05	23.16	22.71	23.83	24.63
	3H	17.41	18.35	18.09	19.06	19.87	24.14	25.07	24.82	25.78	26.60
	4H	17.53	18.38	18.22	19.09	19.93	24.93	25.78	25.63	26.49	27.34
	6H	17.56	18.30	18.28	19.04	19.90	25.50	26.24	26.21	26.98	27.83
	8H	17.55	18.25	18.27	18.98	19.85	25.67	26.37	26.40	27.10	27.97
	12H	17.53	18.16	18.27	18.92	19.79	25.79	26.42	26.54	27.18	28.05
8H	4H	19.01	19.71	19.73	20.44	21.31	25.03	25.72	25.75	26.46	27.32
	6H	19.27	19.85	20.03	20.63	21.50	25.68	26.26	26.43	27.04	27.90
	8H	19.30	19.81	20.06	20.59	21.48	25.91	26.42	26.67	27.20	28.09
	12H	19.29	19.74	20.06	20.51	21.46	26.08	26.53	26.85	27.30	28.25
12H	4H	19.18	19.81	19.92	20.56	21.44	25.00	25.63	25.74	26.39	27.26
	6H	19.54	20.06	20.30	20.84	21.72	25.67	26.19	26.43	26.96	27.85
	8H	19.63	20.09	20.40	20.86	21.80	25.92	26.38	26.69	27.15	28.09