

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: P936769

Luminaire Tested: SQ4-FB-050U-075D-935-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

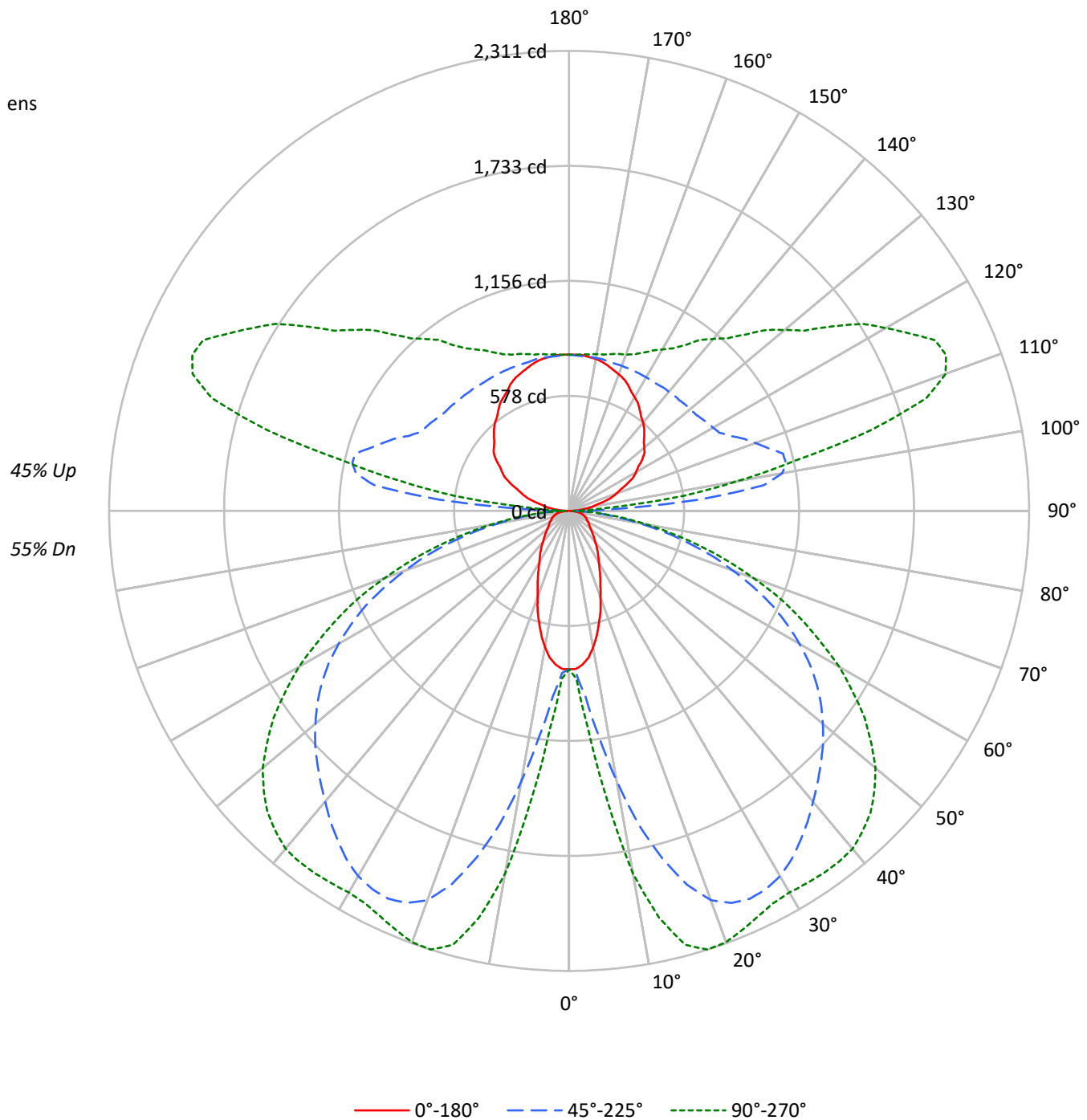
Test Method: LM-79-2019  
Report Number: P936769  
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11241.2 lumens  
Efficiency: N/A  
Efficacy: 102.9 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: General Diffuse  
  
Input Watts (W): 109.2  
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

TEST NUMBER: P936769  
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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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55			
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45			
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37			
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30			
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25			
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21			
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18			
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16			
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14			
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12			
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11			

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

	0°	45°	90°
0°	2459	2459	2459
5°	2403	2843	3305
10°	2180	4145	5479
15°	1854	5416	6616
20°	1510	6278	6743
25°	1260	6571	6606
30°	1063	6615	6593
35°	940	6506	6764
40°	820	6366	6940
45°	743	6263	6967
50°	682	6171	6852
55°	654	6035	6548
60°	670	5773	6069
65°	698	5373	5410
70°	745	4689	4570
75°	830	3827	3567
80°	913	2657	2403
85°	830	1412	1230

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6967 cd/sqm



TEST NUMBER: P936769

CATALOG NUMBER: SQ4-FB-050U-075D-935-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.8	0.9
10°-20°	455.7	4.1
20°-30°	797.2	7.1
30°-40°	1026.2	9.1
40°-50°	1146.2	10.2
50°-60°	1097.8	9.8
60°-70°	870.0	7.7
70°-80°	511.6	4.6
80°-90°	145.1	1.3
90°-100°	382.6	3.4
100°-110°	1005.9	8.9
110°-120°	1043.0	9.3
120°-130°	836.7	7.4
130°-140°	656.5	5.8
140°-150°	503.9	4.5
150°-160°	362.9	3.2
160°-170°	222.0	2.0
170°-180°	75.0	0.7
0°-30°	1355.7	12.1
0°-40°	2381.9	21.2
0°-60°	4626.0	41.2
0°-90°	6152.7	54.7
90°-120°	2431.6	21.6
90°-150°	4428.6	39.4
90°-180°	5089.0	45.3
0°-180°	11241.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	774	831	936	1058	1097	71
15°	580	1071	1805	2188	2257	161
25°	371	1214	2150	2244	2247	171
35°	250	1160	2024	2140	2224	156
45°	171	925	1789	2050	2142	132
55°	123	588	1518	1764	1812	112
65°	97	312	1127	1268	1286	96
75°	72	192	619	680	682	75
85°	26	59	153	169	171	27
90°	5	15	40	20	20	6
95°	51	198	659	340	231	56
105°	181	274	1112	1688	1575	192
115°	322	391	891	1777	2028	318
125°	448	502	810	1369	1615	398
135°	534	587	785	1105	1253	413
145°	619	658	775	943	1017	388
155°	700	719	775	851	876	321
165°	755	765	775	806	816	213
175°	785	785	780	790	790	75
180°	785	785	785	785	785	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9
2.5°	794.9	794.9	800.0	802.6	807.7	810.3	815.4	820.5	835.8	838.4	843.5
5°	774.5	784.7	817.9	830.7	866.5	915.0	935.5	968.8	1037.8	1058.3	1071.0
7.5°	743.8	766.8	848.6	869.0	958.5	1086.4	1140.1	1211.6	1321.5	1375.2	1418.7
10°	695.2	743.8	889.5	938.1	1083.8	1278.1	1377.8	1477.5	1643.6	1717.7	1745.8
12.5°	641.6	720.8	932.9	999.5	1209.1	1492.8	1612.9	1722.8	1912.0	2011.7	2027.0
15°	580.2	687.6	973.9	1071.0	1342.0	1671.7	1804.6	1940.1	2116.5	2188.0	2205.9
17.5°	526.5	662.0	1012.3	1114.5	1444.2	1832.7	1968.2	2080.7	2223.8	2272.4	2285.1
20°	460.1	621.1	1037.8	1170.7	1551.6	1950.3	2080.7	2167.6	2264.7	2295.4	2300.5
22.5°	411.5	577.7	1053.2	1191.2	1623.1	2021.9	2131.8	2200.8	2267.3	2277.5	2280.0
25°	370.6	529.1	1050.6	1214.2	1684.5	2065.3	2149.7	2200.8	2239.1	2244.3	2244.3
27.5°	332.3	475.4	1040.4	1219.3	1730.5	2075.6	2142.0	2177.8	2195.7	2205.9	2205.9
30°	299.1	424.3	1014.8	1209.1	1750.9	2065.3	2119.0	2136.9	2154.8	2170.1	2177.8
32.5°	273.5	375.7	976.5	1188.6	1753.5	2039.8	2078.1	2088.3	2113.9	2149.7	2162.5
35°	250.5	327.2	932.9	1160.5	1738.2	1998.9	2024.4	2034.7	2085.8	2139.5	2157.3
37.5°	227.5	291.4	876.7	1111.9	1715.2	1950.3	1968.2	1986.1	2065.3	2129.2	2149.7
40°	204.5	260.7	810.3	1058.3	1679.4	1891.5	1906.9	1935.0	2039.8	2113.9	2134.3
42.5°	186.6	235.2	738.7	1002.0	1633.4	1825.1	1848.1	1889.0	2009.1	2088.3	2111.3
45°	171.3	209.6	662.0	925.3	1574.6	1756.1	1789.3	1845.5	1973.3	2050.0	2070.4
47.5°	155.9	191.7	582.8	846.0	1510.7	1687.0	1730.5	1794.4	1924.8	1998.9	2016.8
50°	143.1	173.8	503.5	761.7	1441.7	1612.9	1664.0	1730.5	1863.4	1932.4	1955.4
52.5°	132.9	158.5	429.4	677.3	1362.4	1536.2	1595.0	1664.0	1789.3	1855.7	1871.1
55°	122.7	145.7	365.5	587.9	1280.6	1454.4	1518.3	1584.8	1707.5	1763.7	1773.9
57.5°	117.6	135.5	311.8	503.5	1193.7	1362.4	1434.0	1495.3	1610.4	1653.8	1664.0
60°	109.9	127.8	270.9	432.0	1099.2	1275.5	1336.9	1398.2	1495.3	1531.1	1538.8
62.5°	102.2	122.7	240.3	363.0	1002.0	1173.3	1234.6	1290.9	1372.7	1398.2	1408.4
65°	97.1	117.6	217.3	311.8	902.3	1065.9	1127.3	1175.8	1242.3	1267.9	1273.0
67.5°	92.0	112.5	199.4	268.4	802.6	958.5	1004.6	1050.6	1101.7	1127.3	1129.8
70°	84.3	107.4	184.0	237.7	700.3	835.8	874.2	922.7	963.6	976.5	984.1
72.5°	79.2	99.7	173.8	214.7	595.5	718.2	754.0	782.1	817.9	830.7	830.7
75°	71.6	89.5	163.6	191.7	488.2	587.9	618.6	646.7	674.8	679.9	672.2
77.5°	63.9	79.2	140.6	161.0	380.8	465.2	490.8	506.1	529.1	534.2	536.8
80°	53.7	69.0	109.9	125.2	276.0	342.5	360.4	373.2	393.6	393.6	398.7
82.5°	40.9	53.7	79.2	89.5	186.6	235.2	250.5	258.2	270.9	270.9	270.9
85°	25.6	33.2	51.1	58.8	112.5	143.1	153.4	155.9	166.1	168.7	168.7
87.5°	12.8	17.9	33.2	35.8	58.8	74.1	74.1	79.2	79.2	76.7	74.1
90°	5.3	9.5	13.7	14.7	23.2	34.4	40.0	35.6	26.7	20.0	20.0
92.5°	21.0	56.8	92.7	101.6	142.9	197.9	225.4	197.6	141.9	100.1	96.1
95°	50.6	116.1	181.7	198.1	351.7	556.6	659.0	588.1	446.2	339.8	327.7
97.5°	87.4	145.3	203.1	217.6	473.8	815.4	986.2	941.4	851.7	784.4	761.5
100°	115.9	168.4	220.8	233.9	518.2	897.2	1086.8	1090.0	1096.6	1101.6	1074.2
102.5°	140.2	189.1	238.0	250.2	538.5	923.1	1115.3	1172.4	1286.6	1372.3	1348.9
105°	181.2	222.6	264.0	274.4	553.6	926.0	1112.1	1240.2	1496.3	1688.4	1675.8
107.5°	223.4	262.0	300.7	310.3	556.5	884.8	1048.9	1227.6	1584.9	1852.8	1855.9
110°	251.9	286.7	321.6	330.3	552.3	848.3	996.2	1196.0	1595.4	1894.9	1908.1



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CATALOG NUMBER: SQ4-FB-050U-075D-935-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	279.7	312.9	346.2	354.5	552.4	816.3	948.3	1152.7	1561.5	1868.1	1888.2
115°	321.9	352.6	383.2	390.9	557.5	779.8	890.9	1087.7	1481.5	1776.9	1804.9
117.5°	363.5	391.3	419.2	426.2	567.9	756.8	851.3	1029.0	1384.4	1651.0	1681.9
120°	387.7	414.0	440.1	446.7	576.3	749.2	835.6	997.9	1322.6	1566.2	1596.3
122.5°	411.4	437.9	464.3	471.0	588.5	745.1	823.4	969.6	1262.1	1481.4	1511.0
125°	447.8	471.9	496.0	502.1	604.8	741.8	810.3	934.5	1182.8	1369.2	1396.5
127.5°	477.3	501.7	526.0	532.1	621.1	739.8	799.2	905.8	1119.1	1279.1	1302.2
130°	493.1	519.4	545.5	552.1	633.0	741.0	795.0	889.9	1079.8	1222.2	1243.5
132.5°	509.4	535.7	561.9	568.5	642.7	741.8	791.3	876.3	1046.3	1173.7	1192.8
135°	533.7	557.5	581.4	587.4	653.2	741.1	784.9	856.2	998.5	1105.3	1121.7
137.5°	558.4	582.1	605.8	611.7	669.1	745.7	783.9	844.1	964.5	1054.7	1068.2
140°	578.9	600.7	622.5	627.9	678.7	746.4	780.2	832.1	936.2	1014.1	1026.7
142.5°	594.8	614.9	635.1	640.1	686.8	749.1	780.2	825.8	917.2	985.7	996.5
145°	619.0	636.5	654.1	658.5	697.4	749.1	775.0	812.3	887.0	943.0	951.2
147.5°	643.3	660.3	677.4	681.7	712.8	754.3	775.0	804.4	863.2	907.2	914.0
150°	659.0	674.4	689.9	693.8	720.9	756.9	775.0	799.8	849.4	886.6	892.1
152.5°	675.4	687.1	698.8	701.7	726.2	758.7	775.0	796.2	838.5	870.3	874.5
155°	699.6	708.3	717.0	719.1	737.7	762.5	775.0	791.8	825.5	850.8	853.5
157.5°	717.6	726.0	734.3	736.5	749.3	766.5	775.0	788.1	814.3	833.9	835.9
160°	729.7	736.2	742.8	744.4	754.6	768.2	775.0	786.2	808.6	825.5	826.6
162.5°	741.8	746.7	751.6	752.8	760.2	770.0	775.0	784.4	803.4	817.6	818.6
165°	755.0	759.4	763.8	764.9	768.2	772.8	775.0	781.8	795.3	805.5	806.6
167.5°	767.1	769.1	771.2	771.7	774.6	778.3	780.2	784.6	793.6	800.2	800.7
170°	775.0	777.0	779.2	779.7	779.8	780.1	780.2	784.6	793.6	800.2	800.2
172.5°	779.2	779.6	780.1	780.2	780.2	780.2	780.2	783.7	790.7	796.0	795.6
175°	784.9	784.9	784.9	784.9	783.3	781.2	780.2	782.4	786.9	790.2	790.2
177.5°	784.9	784.9	784.9	784.9	783.8	782.1	781.3	783.1	786.6	789.2	788.7
180°	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	794.9	794.9
2.5°	848.6	843.5
5°	1091.5	1096.6
7.5°	1469.8	1467.2
10°	1827.6	1850.6
12.5°	2088.3	2093.4
15°	2246.8	2257.0
17.5°	2308.2	2310.7
20°	2310.7	2305.6
22.5°	2282.6	2277.5
25°	2249.4	2246.8
27.5°	2218.7	2221.2
30°	2205.9	2213.6
32.5°	2205.9	2218.7
35°	2211.0	2223.8
37.5°	2208.5	2223.8
40°	2198.2	2216.1
42.5°	2170.1	2182.9
45°	2126.7	2142.0
47.5°	2070.4	2080.7
50°	1998.9	2009.1
52.5°	1909.4	1912.0
55°	1802.1	1812.3
57.5°	1687.0	1689.6
60°	1559.2	1566.9
62.5°	1423.8	1423.8
65°	1280.6	1285.8
67.5°	1132.4	1145.2
70°	981.6	984.1
72.5°	833.3	833.3
75°	679.9	682.5
77.5°	534.2	534.2
80°	396.2	398.7
82.5°	273.5	278.6
85°	171.3	171.3
87.5°	79.2	71.6
90°	20.0	20.0
92.5°	80.2	64.2
95°	279.5	231.2
97.5°	669.7	577.9
100°	964.9	855.6
102.5°	1255.3	1161.6
105°	1625.5	1575.2
107.5°	1868.0	1880.2
110°	1960.5	2012.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1968.8	2049.3
115°	1916.6	2028.3
117.5°	1805.8	1929.7
120°	1716.7	1837.0
122.5°	1629.8	1748.5
125°	1505.8	1615.2
127.5°	1394.4	1486.7
130°	1328.8	1414.0
132.5°	1269.1	1345.5
135°	1187.5	1253.3
137.5°	1122.0	1175.8
140°	1077.0	1127.4
142.5°	1039.9	1083.1
145°	984.0	1016.8
147.5°	941.1	968.3
150°	914.1	936.2
152.5°	891.1	907.7
155°	864.6	875.6
157.5°	843.6	851.3
160°	831.1	835.6
162.5°	822.9	827.1
165°	811.1	815.5
167.5°	802.6	804.5
170°	800.2	800.2
172.5°	794.0	792.4
175°	790.2	790.2
177.5°	786.8	784.9
180°	784.9	784.9



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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	4.56	5.50	5.46	6.44	7.64	17.75	18.70	18.66	19.63	20.83
	3H	5.27	6.12	6.19	7.06	8.29	19.60	20.45	20.52	21.39	22.62
	4H	5.57	6.38	6.50	7.33	8.56	20.25	21.06	21.19	22.01	23.24
	6H	5.83	6.57	6.77	7.52	8.77	20.69	21.44	21.64	22.39	23.64
	8H	5.90	6.61	6.85	7.58	8.82	20.82	21.53	21.77	22.50	23.74
	12H	5.92	6.59	6.88	7.56	8.83	20.89	21.57	21.85	22.53	23.80
4H	2H	11.79	12.60	12.73	13.55	14.78	18.03	18.84	18.97	19.79	21.02
	3H	13.37	14.04	14.32	15.02	16.27	20.09	20.77	21.04	21.75	22.99
	4H	13.46	14.08	14.42	15.05	16.32	20.87	21.49	21.83	22.46	23.73
	6H	13.48	14.02	14.45	15.01	16.28	21.42	21.95	22.39	22.95	24.21
	8H	13.46	13.96	14.43	14.95	16.23	21.58	22.08	22.56	23.07	24.36
	12H	13.42	13.87	14.41	14.88	16.17	21.68	22.14	22.68	23.14	24.43
8H	4H	14.92	15.42	15.89	16.41	17.69	20.93	21.43	21.91	22.42	23.71
	6H	15.17	15.58	16.17	16.61	17.89	21.57	21.99	22.57	23.02	24.30
	8H	15.19	15.55	16.19	16.57	17.87	21.80	22.16	22.80	23.18	24.48
	12H	15.16	15.48	16.17	16.49	17.84	21.95	22.27	22.96	23.28	24.63
12H	4H	15.07	15.52	16.06	16.53	17.82	20.89	21.34	21.89	22.35	23.64
	6H	15.43	15.80	16.44	16.81	18.11	21.56	21.92	22.56	22.94	24.24
	8H	15.50	15.82	16.51	16.84	18.18	21.79	22.12	22.81	23.13	24.47