

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: P937737

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937737
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

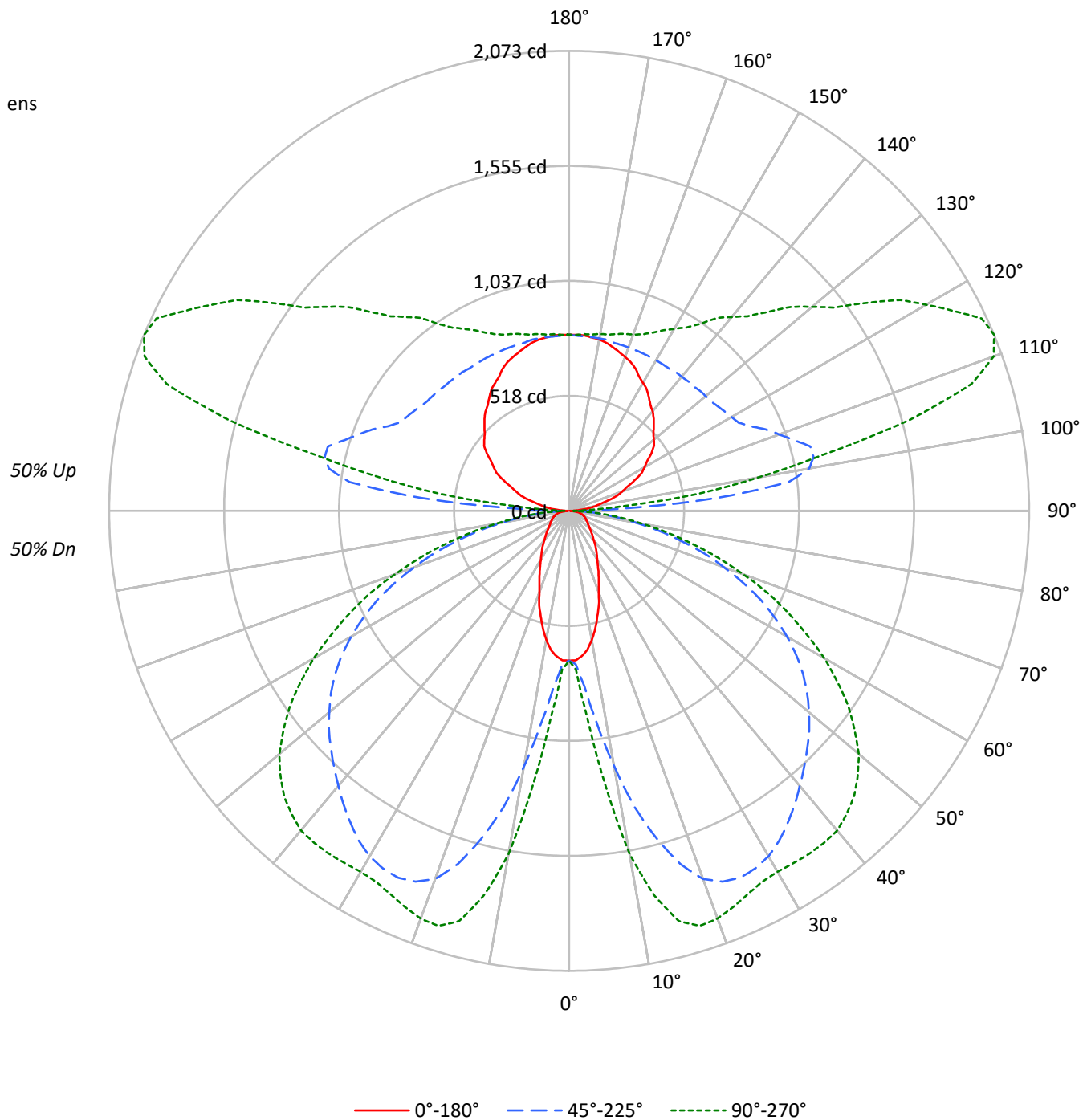
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10366.6 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.2
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: P937737
CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P937737

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

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	0
RCR																		
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4171	4171	4171
5°	4073	4820	5607
10°	3693	7024	9295
15°	3138	9175	11224
20°	2554	10629	11438
25°	2129	11120	11206
30°	1795	11187	11185
35°	1586	10999	11475
40°	1382	10755	11773
45°	1250	10574	11819
50°	1146	10412	11624
55°	1096	10176	11109
60°	1121	9724	10294
65°	1165	9040	9177
70°	1238	7879	7753
75°	1366	6418	6049
80°	1481	4446	4076
85°	1294	2355	2087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11819 cd/sqm



TEST NUMBER: P937737

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	0.8
10°-20°	386.6	3.7
20°-30°	676.2	6.5
30°-40°	870.4	8.4
40°-50°	972.2	9.4
50°-60°	931.2	9.0
60°-70°	737.9	7.1
70°-80°	433.9	4.2
80°-90°	123.6	1.2
90°-100°	387.0	3.7
100°-110°	1017.6	9.8
110°-120°	1055.1	10.2
120°-130°	846.3	8.2
130°-140°	664.1	6.4
140°-150°	509.7	4.9
150°-160°	367.1	3.5
160°-170°	224.6	2.2
170°-180°	75.9	0.7
0°-30°	1149.9	11.1
0°-40°	2020.4	19.5
0°-60°	3923.7	37.8
0°-90°	5219.2	50.3
90°-120°	2459.7	23.7
90°-150°	4479.8	43.2
90°-180°	5147.0	49.7
0°-180°	10366.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	657	705	794	898	930	61
15°	492	908	1531	1856	1914	137
25°	314	1030	1823	1904	1906	145
35°	212	984	1717	1815	1886	133
45°	145	785	1518	1739	1817	112
55°	104	499	1288	1496	1537	95
65°	82	264	956	1075	1091	82
75°	61	163	525	577	579	64
85°	22	50	130	143	145	23
90°	5	15	40	20	20	6
95°	51	200	667	344	234	57
105°	183	278	1125	1708	1593	194
115°	326	395	901	1798	2052	322
125°	453	508	820	1385	1634	402
135°	540	594	794	1118	1268	418
145°	626	666	784	954	1028	392
155°	708	727	784	861	886	325
165°	764	774	784	815	825	216
175°	794	794	789	799	799	75
180°	794	794	794	794	794	



TEST NUMBER: P937737

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2
2.5°	674.2	674.2	678.6	680.7	685.1	687.3	691.6	695.9	708.9	711.1	715.5
5°	656.9	665.6	693.8	704.7	735.0	776.1	793.5	821.7	880.3	897.6	908.5
7.5°	630.9	650.4	719.8	737.1	813.0	921.4	967.0	1027.7	1120.9	1166.4	1203.3
10°	589.7	630.9	754.5	795.7	919.3	1084.1	1168.6	1253.2	1394.1	1457.0	1480.8
12.5°	544.2	611.4	791.3	847.7	1025.5	1266.2	1368.1	1461.2	1621.7	1706.3	1719.3
15°	492.1	583.2	826.0	908.5	1138.2	1417.9	1530.7	1645.6	1795.2	1855.8	1871.1
17.5°	446.6	561.5	858.6	945.3	1225.0	1554.5	1669.4	1764.8	1886.3	1927.4	1938.3
20°	390.3	526.8	880.3	993.0	1316.0	1654.3	1764.8	1838.5	1920.9	1946.9	1951.3
22.5°	349.1	490.0	893.2	1010.3	1376.8	1714.9	1808.2	1866.7	1923.1	1931.8	1933.9
25°	314.4	448.8	891.1	1029.8	1428.8	1751.8	1823.4	1866.7	1899.2	1903.6	1903.6
27.5°	281.9	403.2	882.4	1034.2	1467.8	1760.4	1816.8	1847.2	1862.3	1871.1	1871.1
30°	253.7	359.9	860.7	1025.5	1485.2	1751.8	1797.3	1812.5	1827.7	1840.7	1847.2
32.5°	232.0	318.7	828.2	1008.1	1487.3	1730.1	1762.7	1771.3	1793.0	1823.4	1834.2
35°	212.5	277.5	791.3	984.3	1474.3	1695.4	1717.1	1725.8	1769.2	1814.7	1829.9
37.5°	192.9	247.2	743.7	943.1	1454.8	1654.3	1669.4	1684.6	1751.8	1806.0	1823.4
40°	173.5	221.1	687.3	897.6	1424.4	1604.4	1617.4	1641.2	1730.1	1793.0	1810.3
42.5°	158.3	199.4	626.6	849.9	1385.4	1548.0	1567.5	1602.2	1704.1	1771.3	1790.9
45°	145.3	177.7	561.5	784.9	1335.5	1489.4	1517.6	1565.4	1673.7	1738.8	1756.2
47.5°	132.2	162.6	494.3	717.6	1281.4	1430.9	1467.8	1522.0	1632.6	1695.4	1710.6
50°	121.4	147.4	427.1	646.1	1222.8	1368.1	1411.4	1467.8	1580.6	1639.1	1658.5
52.5°	112.7	134.4	364.2	574.6	1155.5	1303.0	1352.9	1411.4	1517.6	1574.0	1587.1
55°	104.0	123.6	310.0	498.6	1086.2	1233.6	1287.9	1344.2	1448.3	1496.0	1504.6
57.5°	99.8	114.9	264.5	427.1	1012.5	1155.5	1216.3	1268.3	1365.9	1402.7	1411.4
60°	93.2	108.4	229.8	366.4	932.3	1081.8	1133.9	1186.0	1268.3	1298.7	1305.2
62.5°	86.7	104.0	203.8	307.8	849.9	995.1	1047.2	1094.9	1164.3	1186.0	1194.6
65°	82.4	99.8	184.3	264.5	765.3	904.1	956.1	997.3	1053.7	1075.3	1079.7
67.5°	78.1	95.4	169.1	227.6	680.7	813.0	852.1	891.1	934.4	956.1	958.3
70°	71.6	91.1	156.1	201.7	594.0	708.9	741.5	782.6	817.4	828.2	834.7
72.5°	67.2	84.6	147.4	182.1	505.1	609.2	639.6	663.4	693.8	704.7	704.7
75°	60.7	75.8	138.8	162.6	414.1	498.6	524.7	548.5	572.4	576.7	570.2
77.5°	54.2	67.2	119.2	136.6	323.0	394.6	416.3	429.3	448.8	453.1	455.3
80°	45.5	58.5	93.2	106.3	234.1	290.5	305.7	316.5	333.9	333.9	338.2
82.5°	34.7	45.5	67.2	75.8	158.3	199.4	212.5	219.0	229.8	229.8	229.8
85°	21.7	28.2	43.4	49.9	95.4	121.4	130.1	132.2	140.9	143.1	143.1
87.5°	10.8	15.2	28.2	30.3	49.9	62.9	62.9	67.2	67.2	65.1	62.9
90°	5.3	9.6	13.8	14.9	23.5	34.8	40.5	36.0	27.0	20.2	20.2
92.5°	21.4	57.6	93.8	102.8	144.6	200.2	228.1	199.9	143.5	101.2	97.2
95°	51.2	117.4	183.8	200.4	355.8	563.0	666.6	594.9	451.3	343.7	331.5
97.5°	88.5	147.0	205.5	220.1	479.3	824.8	997.6	952.3	861.6	793.5	770.3
100°	117.3	170.3	223.4	236.6	524.2	907.6	1099.3	1102.7	1109.3	1114.3	1086.6
102.5°	141.8	191.3	240.8	253.2	544.8	933.7	1128.1	1186.0	1301.5	1388.2	1364.6
105°	183.3	225.2	267.2	277.7	560.1	936.7	1125.0	1254.5	1513.6	1707.9	1695.2
107.5°	225.9	265.0	304.2	313.9	563.0	895.0	1061.0	1241.7	1603.1	1874.2	1877.3
110°	254.7	290.0	325.3	334.1	558.7	858.1	1007.7	1209.7	1613.8	1916.8	1930.1



TEST NUMBER: P937737

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	283.0	316.6	350.3	358.6	558.9	825.8	959.2	1166.0	1579.5	1889.7	1910.0
115°	325.6	356.6	387.6	395.4	564.0	788.7	901.1	1100.3	1498.7	1797.5	1825.8
117.5°	367.7	395.9	424.1	431.1	574.4	765.6	861.1	1040.9	1400.4	1670.1	1701.4
120°	392.2	418.8	445.3	451.9	583.0	757.8	845.2	1009.4	1337.9	1584.3	1614.7
122.5°	416.2	443.0	469.8	476.4	595.2	753.7	832.9	980.9	1276.7	1498.5	1528.5
125°	452.9	477.4	501.8	507.9	611.8	750.4	819.6	945.3	1196.5	1385.1	1412.7
127.5°	482.8	507.4	532.1	538.3	628.3	748.4	808.4	916.3	1132.1	1293.9	1317.2
130°	498.8	525.4	551.9	558.5	640.4	749.6	804.2	900.2	1092.3	1236.4	1257.9
132.5°	515.3	541.9	568.3	575.0	650.2	750.4	800.4	886.4	1058.4	1187.3	1206.6
135°	539.8	564.0	588.2	594.2	660.8	749.6	794.0	866.0	1010.0	1118.1	1134.7
137.5°	564.8	588.8	612.8	618.7	676.8	754.3	793.0	853.9	975.6	1066.9	1080.5
140°	585.7	607.7	629.7	635.2	686.5	755.0	789.2	841.8	947.0	1025.8	1038.5
142.5°	601.6	622.1	642.4	647.5	694.7	757.7	789.2	835.4	927.8	997.0	1008.0
145°	626.2	643.9	661.7	666.1	705.4	757.8	783.9	821.7	897.3	953.9	962.2
147.5°	650.7	667.9	685.2	689.5	721.0	762.9	783.9	813.6	873.1	917.7	924.5
150°	666.6	682.3	697.9	701.8	729.2	765.6	783.9	809.0	859.2	896.8	902.4
152.5°	683.2	695.1	706.9	709.9	734.6	767.4	783.9	805.4	848.2	880.3	884.5
155°	707.7	716.4	725.2	727.4	746.3	771.4	783.9	801.0	835.1	860.6	863.4
157.5°	725.8	734.4	742.8	745.0	758.0	775.3	783.9	797.2	823.7	843.6	845.6
160°	738.1	744.7	751.4	753.0	763.3	777.1	783.9	795.3	818.0	835.1	836.2
162.5°	750.4	755.3	760.3	761.5	769.0	779.0	783.9	793.5	812.7	827.1	828.1
165°	763.7	768.1	772.6	773.8	777.2	781.7	783.9	790.8	804.5	814.8	815.9
167.5°	775.9	778.0	780.2	780.7	783.5	787.3	789.2	793.7	802.7	809.5	810.0
170°	783.9	786.1	788.2	788.7	788.9	789.1	789.2	793.7	802.7	809.5	809.5
172.5°	788.2	788.6	789.1	789.2	789.2	789.2	789.2	792.8	799.9	805.2	804.8
175°	794.0	794.0	794.0	794.0	792.4	790.2	789.2	791.4	796.0	799.4	799.4
177.5°	794.0	794.0	794.0	794.0	792.8	791.2	790.3	792.1	795.6	798.3	797.8
180°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0



TEST NUMBER: P937737

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	674.2	674.2
2.5°	719.8	715.5
5°	925.8	930.1
7.5°	1246.7	1244.5
10°	1550.2	1569.7
12.5°	1771.3	1775.6
15°	1905.7	1914.4
17.5°	1957.7	1960.0
20°	1960.0	1955.6
22.5°	1936.1	1931.8
25°	1907.9	1905.7
27.5°	1881.9	1884.0
30°	1871.1	1877.5
32.5°	1871.1	1881.9
35°	1875.4	1886.3
37.5°	1873.2	1886.3
40°	1864.6	1879.7
42.5°	1840.7	1851.6
45°	1803.8	1816.8
47.5°	1756.2	1764.8
50°	1695.4	1704.1
52.5°	1619.5	1621.7
55°	1528.5	1537.2
57.5°	1430.9	1433.1
60°	1322.5	1329.0
62.5°	1207.7	1207.7
65°	1086.2	1090.6
67.5°	960.5	971.3
70°	832.5	834.7
72.5°	706.8	706.8
75°	576.7	578.8
77.5°	453.1	453.1
80°	336.0	338.2
82.5°	232.0	236.3
85°	145.3	145.3
87.5°	67.2	60.7
90°	20.2	20.2
92.5°	81.1	65.0
95°	282.7	233.9
97.5°	677.4	584.6
100°	976.0	865.4
102.5°	1269.7	1175.0
105°	1644.3	1593.4
107.5°	1889.7	1902.0
110°	1983.2	2036.2



TEST NUMBER: P937737

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1991.5	2073.0
115°	1938.7	2051.7
117.5°	1826.7	1952.0
120°	1736.5	1858.2
122.5°	1648.6	1768.7
125°	1523.3	1633.9
127.5°	1410.6	1503.9
130°	1344.1	1430.3
132.5°	1283.8	1361.1
135°	1201.2	1267.8
137.5°	1135.0	1189.5
140°	1089.5	1140.4
142.5°	1051.9	1095.7
145°	995.4	1028.5
147.5°	952.0	979.5
150°	924.7	947.0
152.5°	901.4	918.2
155°	874.5	885.6
157.5°	853.4	861.1
160°	840.7	845.2
162.5°	832.3	836.6
165°	820.5	824.9
167.5°	811.8	813.7
170°	809.5	809.5
172.5°	803.1	801.5
175°	799.4	799.4
177.5°	795.9	794.0
180°	794.0	794.0



TEST NUMBER: P937737

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-2700K

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	5.99	6.90	6.94	7.87	9.13	19.16	20.06	20.11	21.03	22.29
	3H	6.70	7.52	7.66	8.49	9.78	21.00	21.81	21.95	22.79	24.07
	4H	7.00	7.77	7.97	8.75	10.05	21.64	22.41	22.61	23.39	24.69
	6H	7.26	7.97	8.24	8.95	10.26	22.07	22.78	23.05	23.77	25.07
	8H	7.33	8.00	8.31	9.01	10.31	22.19	22.87	23.18	23.87	25.17
	12H	7.34	7.99	8.34	8.99	10.32	22.26	22.90	23.25	23.90	25.23
4H	2H	13.21	13.98	14.18	14.96	16.25	19.44	20.21	20.42	21.19	22.48
	3H	14.78	15.42	15.77	16.43	17.74	21.48	22.13	22.47	23.14	24.45
	4H	14.88	15.47	15.87	16.47	17.80	22.25	22.84	23.25	23.84	25.17
	6H	14.89	15.40	15.90	16.43	17.75	22.79	23.30	23.79	24.32	25.65
	8H	14.87	15.34	15.88	16.36	17.71	22.95	23.42	23.96	24.44	25.79
	12H	14.83	15.26	15.85	16.29	17.64	23.04	23.47	24.07	24.51	25.86
8H	4H	16.32	16.80	17.33	17.82	19.16	22.31	22.79	23.32	23.81	25.15
	6H	16.56	16.96	17.60	18.02	19.36	22.94	23.34	23.97	24.40	25.74
	8H	16.58	16.93	17.63	17.98	19.34	23.16	23.51	24.20	24.55	25.91
	12H	16.55	16.86	17.60	17.90	19.31	23.30	23.61	24.35	24.65	26.05
12H	4H	16.46	16.90	17.49	17.93	19.28	22.27	22.70	23.30	23.74	25.09
	6H	16.82	17.17	17.86	18.22	19.58	22.92	23.27	23.97	24.32	25.68
	8H	16.89	17.20	17.94	18.24	19.65	23.15	23.46	24.20	24.50	25.91