

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: P937911

Luminaire Tested: SQ4-FB-125U-075D-830-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937911
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

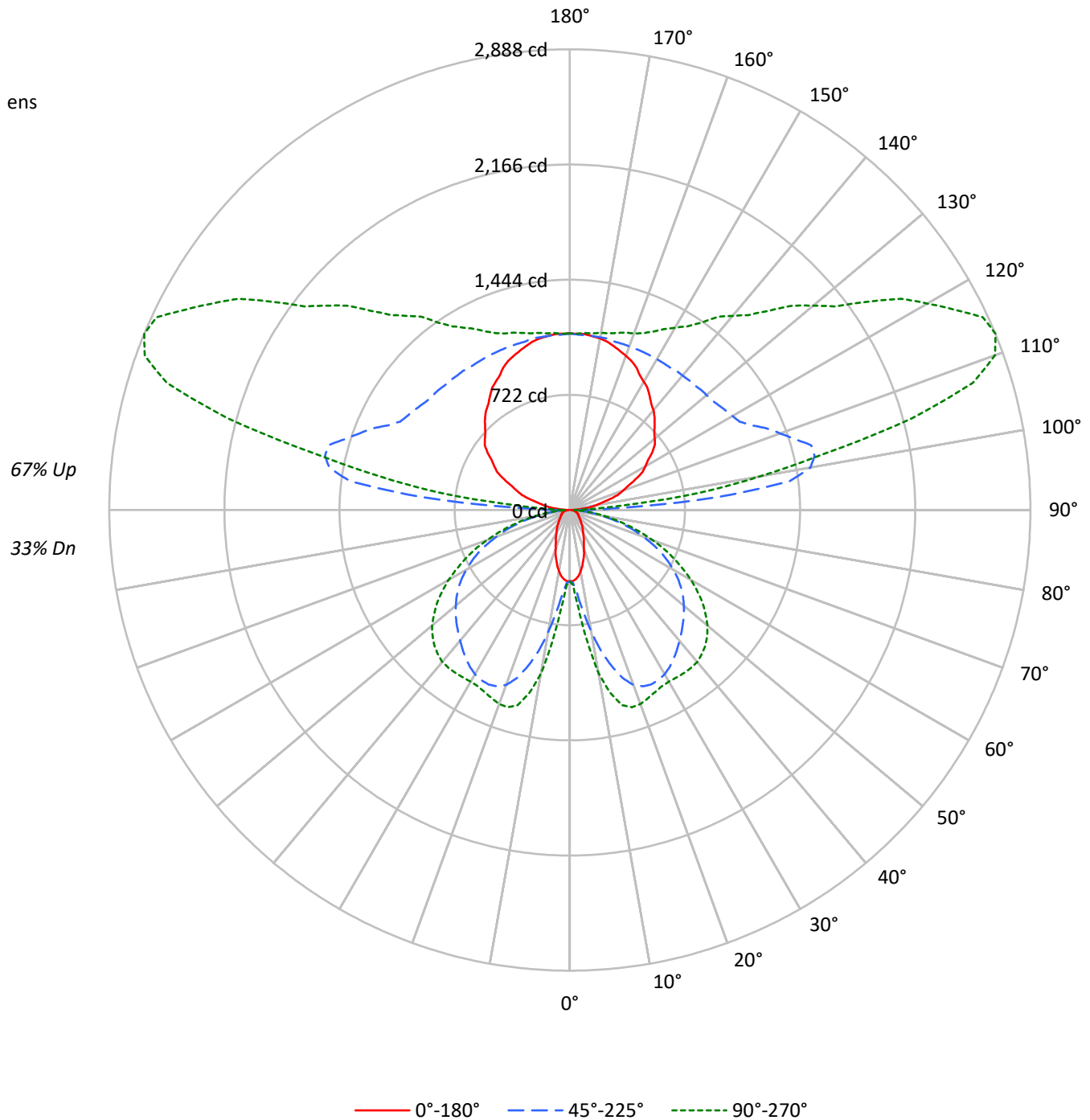
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10625.8 lumens
Efficiency: N/A
Efficacy: 127.4 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: Semi-Indirect

Input Watts (W): 83.4
Input Voltage (V): NR
Input Current (A_{in}): 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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2759	2759	2759
5°	2694	3188	3708
10°	2443	4646	6148
15°	2075	6068	7424
20°	1689	7031	7566
25°	1408	7356	7413
30°	1187	7400	7398
35°	1049	7275	7590
40°	913	7113	7788
45°	827	6994	7818
50°	758	6886	7689
55°	725	6730	7347
60°	742	6432	6809
65°	770	5979	6070
70°	818	5211	5128
75°	905	4245	4002
80°	980	2941	2696
85°	853	1557	1380

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7818 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	0.5
10°-20°	255.7	2.4
20°-30°	447.2	4.2
30°-40°	575.7	5.4
40°-50°	643.1	6.1
50°-60°	615.9	5.8
60°-70°	488.1	4.6
70°-80°	287.0	2.7
80°-90°	84.0	0.8
90°-100°	539.3	5.1
100°-110°	1417.7	13.3
110°-120°	1470.0	13.8
120°-130°	1179.1	11.1
130°-140°	925.2	8.7
140°-150°	710.1	6.7
150°-160°	511.4	4.8
160°-170°	312.9	2.9
170°-180°	105.7	1.0
0°-30°	760.6	7.2
0°-40°	1336.4	12.6
0°-60°	2595.3	24.4
0°-90°	3454.4	32.5
90°-120°	3427.0	32.3
90°-150°	6241.4	58.7
90°-180°	7171.0	67.5
0°-180°	10625.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	434	466	525	594	615	40
15°	326	601	1012	1228	1266	91
25°	208	681	1206	1259	1261	96
35°	140	651	1136	1200	1248	88
45°	96	519	1004	1150	1202	74
55°	69	330	852	990	1017	63
65°	54	175	632	711	721	54
75°	40	108	347	381	383	42
85°	14	33	86	95	96	15
90°	8	21	56	28	28	7
95°	71	279	929	479	326	79
105°	255	387	1567	2380	2220	271
115°	454	551	1256	2504	2858	448
125°	631	708	1142	1930	2276	560
135°	752	828	1106	1558	1766	582
145°	872	928	1092	1329	1433	547
155°	986	1014	1092	1199	1234	453
165°	1064	1078	1092	1135	1149	300
175°	1106	1106	1100	1114	1114	105
180°	1106	1106	1106	1106	1106	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0
2.5°	446.0	446.0	448.8	450.3	453.1	454.6	457.4	460.3	468.9	470.4	473.2
5°	434.5	440.2	458.9	466.0	486.1	513.4	524.8	543.5	582.2	593.7	600.8
7.5°	417.3	430.2	476.1	487.6	537.8	609.4	639.6	679.7	741.4	771.5	795.9
10°	390.0	417.3	499.0	526.3	608.0	717.0	772.9	828.9	922.1	963.6	979.4
12.5°	359.9	404.4	523.4	560.7	678.3	837.5	904.9	966.5	1072.6	1128.7	1137.3
15°	325.5	385.7	546.4	600.8	752.8	937.8	1012.4	1088.5	1187.4	1227.6	1237.6
17.5°	295.4	371.4	567.9	625.2	810.2	1028.2	1104.3	1167.4	1247.7	1274.9	1282.1
20°	258.1	348.5	582.2	656.8	870.4	1094.2	1167.4	1216.1	1270.6	1287.8	1290.7
22.5°	230.9	324.1	590.8	668.2	910.6	1134.4	1196.1	1234.8	1272.1	1277.8	1279.2
25°	207.9	296.8	589.4	681.2	945.0	1158.8	1206.1	1234.8	1256.3	1259.1	1259.1
27.5°	186.4	266.7	583.6	684.0	970.8	1164.5	1201.8	1221.9	1231.9	1237.6	1237.6
30°	167.8	238.0	569.3	678.3	982.3	1158.8	1188.9	1198.9	1209.0	1217.6	1221.9
32.5°	153.4	210.8	547.8	666.8	983.7	1144.4	1165.9	1171.7	1186.0	1206.1	1213.3
35°	140.5	183.6	523.4	651.0	975.1	1121.5	1135.8	1141.6	1170.2	1200.4	1210.4
37.5°	127.6	163.5	491.9	623.8	962.2	1094.2	1104.3	1114.3	1158.8	1194.6	1206.1
40°	114.7	146.3	454.6	593.7	942.1	1061.2	1069.8	1085.5	1144.4	1186.0	1197.5
42.5°	104.7	131.9	414.4	562.1	916.3	1023.9	1036.8	1059.7	1127.2	1171.7	1184.6
45°	96.1	117.6	371.4	519.1	883.3	985.2	1003.8	1035.3	1107.1	1150.2	1161.6
47.5°	87.5	107.6	327.0	474.7	847.5	946.4	970.8	1006.7	1079.8	1121.5	1131.5
50°	80.3	97.5	282.5	427.3	808.8	904.9	933.5	970.8	1045.4	1084.1	1097.1
52.5°	74.6	88.9	240.9	380.0	764.3	861.8	894.8	933.5	1003.8	1041.1	1049.7
55°	68.8	81.7	205.1	329.8	718.4	815.9	851.8	889.1	957.9	989.5	995.2
57.5°	66.0	76.0	174.9	282.5	669.7	764.3	804.5	838.9	903.4	927.8	933.5
60°	61.7	71.7	152.0	242.3	616.6	715.6	750.0	784.4	838.9	859.0	863.3
62.5°	57.4	68.8	134.8	203.6	562.1	658.2	692.6	724.2	770.1	784.4	790.1
65°	54.5	66.0	121.9	174.9	506.2	598.0	632.4	659.6	696.9	711.3	714.1
67.5°	51.6	63.1	111.9	150.6	450.3	537.8	563.6	589.4	618.1	632.4	633.8
70°	47.3	60.2	103.2	133.4	392.9	468.9	490.4	517.7	540.6	547.8	552.1
72.5°	44.5	55.9	97.5	120.5	334.1	403.0	423.0	438.8	458.9	466.0	466.0
75°	40.2	50.2	91.8	107.6	273.9	329.8	347.0	362.8	378.6	381.4	377.1
77.5°	35.8	44.5	78.9	90.3	213.7	261.0	275.3	283.9	296.8	299.7	301.1
80°	30.1	38.7	61.7	70.3	154.9	192.2	202.2	209.4	220.8	220.8	223.7
82.5°	22.9	30.1	44.5	50.2	104.7	131.9	140.5	144.8	152.0	152.0	152.0
85°	14.3	18.6	28.7	33.0	63.1	80.3	86.0	87.5	93.2	94.6	94.6
87.5°	7.2	10.0	18.6	20.1	33.0	41.6	41.6	44.5	44.5	43.0	41.6
90°	7.5	13.4	19.3	20.7	32.6	48.5	56.4	50.1	37.6	28.2	28.2
92.5°	29.7	80.2	130.7	143.3	201.4	279.0	317.8	278.5	200.0	141.1	135.5
95°	71.3	163.7	256.0	279.2	495.7	784.5	928.8	828.9	628.9	478.9	461.8
97.5°	123.2	204.7	286.2	306.6	667.7	1149.2	1389.9	1326.7	1200.4	1105.5	1073.2
100°	163.4	237.3	311.2	329.6	730.3	1264.6	1531.7	1536.3	1545.6	1552.4	1513.9
102.5°	197.5	266.4	335.5	352.7	759.1	1300.8	1571.8	1652.3	1813.3	1934.1	1901.1
105°	255.4	313.9	372.2	386.8	780.3	1305.0	1567.4	1747.9	2108.8	2379.6	2361.8
107.5°	314.8	369.2	423.7	437.3	784.3	1246.9	1478.3	1730.1	2233.6	2611.2	2615.5
110°	354.9	404.0	453.1	465.5	778.3	1195.4	1404.0	1685.4	2248.4	2670.7	2689.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	394.3	441.1	487.9	499.7	778.6	1150.5	1336.4	1624.4	2200.6	2632.7	2661.1
115°	453.6	496.8	540.1	550.9	785.8	1098.9	1255.5	1533.0	2088.1	2504.3	2543.7
117.5°	512.3	551.6	590.8	600.7	800.4	1066.6	1199.8	1450.3	1951.2	2326.9	2370.5
120°	546.4	583.4	620.3	629.6	812.2	1055.7	1177.5	1406.4	1864.0	2207.3	2249.8
122.5°	579.9	617.2	654.5	663.8	829.3	1050.1	1160.5	1366.6	1778.7	2087.8	2129.6
125°	631.1	665.1	699.0	707.5	852.4	1045.4	1141.9	1317.0	1667.1	1929.7	1968.2
127.5°	672.6	707.0	741.3	749.9	875.4	1042.7	1126.4	1276.6	1577.3	1802.7	1835.2
130°	694.9	731.9	768.8	778.1	892.1	1044.2	1120.3	1254.2	1521.8	1722.5	1752.5
132.5°	718.0	755.0	791.9	801.1	905.8	1045.4	1115.2	1235.0	1474.5	1654.2	1681.0
135°	752.1	785.7	819.4	827.8	920.6	1044.4	1106.3	1206.6	1407.2	1557.7	1580.8
137.5°	787.0	820.3	853.7	862.0	942.9	1050.8	1104.8	1189.6	1359.1	1486.4	1505.3
140°	815.9	846.6	877.3	885.0	956.5	1051.9	1099.6	1172.8	1319.4	1429.2	1447.0
142.5°	838.2	866.6	895.0	902.1	968.0	1055.7	1099.6	1163.9	1292.6	1389.2	1404.5
145°	872.4	897.1	921.9	928.1	982.8	1055.7	1092.1	1144.8	1250.1	1329.0	1340.6
147.5°	906.6	930.7	954.8	960.8	1004.6	1063.0	1092.1	1133.5	1216.4	1278.6	1288.1
150°	928.8	950.6	972.3	977.8	1015.9	1066.7	1092.1	1127.1	1197.1	1249.6	1257.3
152.5°	951.8	968.3	984.9	989.0	1023.4	1069.2	1092.1	1122.0	1181.7	1226.5	1232.4
155°	986.0	998.3	1010.4	1013.5	1039.6	1074.6	1092.1	1115.9	1163.5	1199.1	1203.0
157.5°	1011.3	1023.1	1035.0	1037.9	1056.0	1080.1	1092.1	1110.6	1147.6	1175.3	1178.0
160°	1028.3	1037.5	1046.8	1049.1	1063.5	1082.6	1092.1	1108.0	1139.6	1163.5	1165.0
162.5°	1045.4	1052.3	1059.2	1061.0	1071.4	1085.3	1092.1	1105.5	1132.2	1152.3	1153.8
165°	1063.9	1070.2	1076.6	1078.1	1082.8	1089.0	1092.1	1101.7	1120.9	1135.2	1136.8
167.5°	1081.0	1084.0	1087.0	1087.7	1091.7	1096.9	1099.6	1105.9	1118.4	1127.8	1128.5
170°	1092.1	1095.1	1098.1	1098.8	1099.1	1099.4	1099.6	1105.9	1118.4	1127.8	1127.8
172.5°	1098.1	1098.7	1099.4	1099.6	1099.6	1099.6	1099.6	1104.6	1114.4	1121.9	1121.3
175°	1106.3	1106.3	1106.3	1106.3	1104.1	1101.1	1099.6	1102.7	1109.1	1113.7	1113.7
177.5°	1106.3	1106.3	1106.3	1106.3	1104.6	1102.2	1101.0	1103.5	1108.5	1112.2	1111.5
180°	1106.3	1106.3	1106.3	1106.3	1106.3	1106.3	1106.3	1106.3	1106.3	1106.3	1106.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	446.0	446.0
2.5°	476.1	473.2
5°	612.3	615.2
7.5°	824.6	823.1
10°	1025.3	1038.2
12.5°	1171.7	1174.5
15°	1260.6	1266.3
17.5°	1295.0	1296.4
20°	1296.4	1293.6
22.5°	1280.7	1277.8
25°	1262.0	1260.6
27.5°	1244.8	1246.2
30°	1237.6	1241.9
32.5°	1237.6	1244.8
35°	1240.5	1247.7
37.5°	1239.1	1247.7
40°	1233.3	1243.4
42.5°	1217.6	1224.7
45°	1193.2	1201.8
47.5°	1161.6	1167.4
50°	1121.5	1127.2
52.5°	1071.2	1072.6
55°	1011.0	1016.7
57.5°	946.4	947.9
60°	874.7	879.0
62.5°	798.7	798.7
65°	718.4	721.3
67.5°	635.3	642.4
70°	550.7	552.1
72.5°	467.5	467.5
75°	381.4	382.9
77.5°	299.7	299.7
80°	222.3	223.7
82.5°	153.4	156.3
85°	96.1	96.1
87.5°	44.5	40.2
90°	28.2	28.2
92.5°	113.0	90.5
95°	393.9	325.9
97.5°	943.9	814.5
100°	1359.9	1205.8
102.5°	1769.1	1637.1
105°	2290.9	2219.9
107.5°	2632.6	2649.8
110°	2763.0	2836.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2774.6	2888.2
115°	2701.1	2858.4
117.5°	2545.1	2719.6
120°	2419.3	2588.9
122.5°	2296.9	2464.2
125°	2122.3	2276.4
127.5°	1965.2	2095.3
130°	1872.7	1992.8
132.5°	1788.7	1896.2
135°	1673.6	1766.3
137.5°	1581.2	1657.1
140°	1517.9	1588.9
142.5°	1465.5	1526.5
145°	1386.8	1432.9
147.5°	1326.4	1364.7
150°	1288.4	1319.4
152.5°	1255.8	1279.2
155°	1218.5	1234.0
157.5°	1188.9	1199.8
160°	1171.3	1177.5
162.5°	1159.7	1165.7
165°	1143.1	1149.3
167.5°	1131.0	1133.7
170°	1127.8	1127.8
172.5°	1119.0	1116.7
175°	1113.7	1113.7
177.5°	1109.0	1106.3
180°	1106.3	1106.3



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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	2.66	3.41	3.75	4.50	6.00	15.83	16.57	16.92	17.67	19.16
	3H	3.36	4.03	4.46	5.13	6.64	17.65	18.32	18.75	19.42	20.94
	4H	3.65	4.29	4.76	5.39	6.91	18.29	18.93	19.40	20.03	21.55
	6H	3.90	4.48	5.01	5.59	7.12	18.71	19.30	19.83	20.40	21.93
	8H	3.96	4.52	5.08	5.64	7.17	18.83	19.38	19.95	20.50	22.03
	12H	3.97	4.50	5.10	5.62	7.17	18.89	19.42	20.01	20.53	22.08
4H	2H	9.86	10.49	10.97	11.59	13.11	16.09	16.72	17.20	17.83	19.35
	3H	11.41	11.95	12.54	13.07	14.61	18.12	18.65	19.24	19.78	21.31
	4H	11.50	11.99	12.63	13.11	14.66	18.88	19.37	20.00	20.48	22.04
	6H	11.51	11.93	12.64	13.07	14.61	19.41	19.83	20.54	20.96	22.51
	8H	11.48	11.87	12.61	13.00	14.57	19.56	19.95	20.69	21.09	22.65
	12H	11.43	11.79	12.58	12.93	14.50	19.65	20.00	20.80	21.15	22.71
8H	4H	12.93	13.33	14.07	14.46	16.02	18.93	19.32	20.06	20.45	22.01
	6H	13.17	13.50	14.33	14.67	16.23	19.55	19.87	20.70	21.04	22.60
	8H	13.19	13.47	14.35	14.62	16.20	19.76	20.05	20.92	21.20	22.78
	12H	13.15	13.40	14.31	14.55	16.16	19.90	20.15	21.06	21.30	22.91
12H	4H	13.07	13.43	14.22	14.57	16.14	18.87	19.23	20.02	20.37	21.94
	6H	13.43	13.71	14.59	14.86	16.44	19.53	19.81	20.69	20.97	22.55
	8H	13.49	13.74	14.66	14.89	16.50	19.75	20.00	20.91	21.15	22.76