

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: P936487

Luminaire Tested: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

**Test Information**

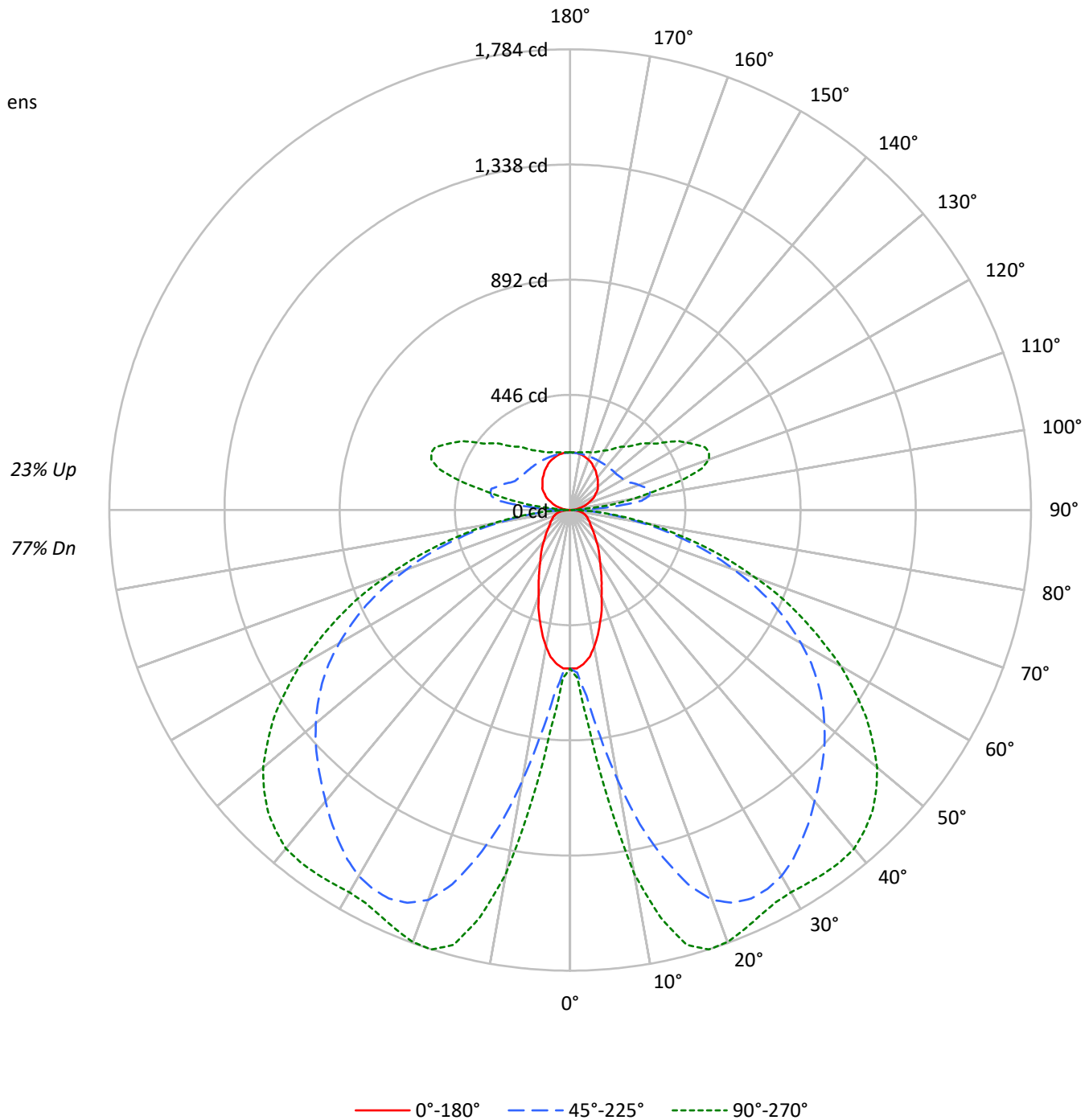
Test Method: LM-79-2019  
Report Number: P936487  
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6195.1 lumens  
Efficiency: N/A  
Efficacy: 106.4 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-Direct  
  
Input Watts (W): 58.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P936487  
CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P936487

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-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	50	30	10	0
RCR																					
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

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

	0°	45°	90°
0°	3797	3797	3797
5°	3709	4388	5104
10°	3362	6395	8462
15°	2857	8353	10218
20°	2325	9677	10414
25°	1939	10124	10202
30°	1634	10185	10183
35°	1444	10014	10447
40°	1258	9791	10718
45°	1138	9628	10760
50°	1044	9479	10583
55°	998	9264	10113
60°	1021	8853	9372
65°	1060	8230	8354
70°	1126	7173	7058
75°	1244	5843	5508
80°	1347	4047	3712
85°	1175	2143	1900

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10760 cd/sqm



TEST NUMBER: P936487

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	1.3
10°-20°	351.9	5.7
20°-30°	615.6	9.9
30°-40°	792.4	12.8
40°-50°	885.1	14.3
50°-60°	847.8	13.7
60°-70°	671.8	10.8
70°-80°	395.1	6.4
80°-90°	110.6	1.8
90°-100°	108.7	1.8
100°-110°	285.7	4.6
110°-120°	296.3	4.8
120°-130°	237.7	3.8
130°-140°	186.5	3.0
140°-150°	143.1	2.3
150°-160°	103.1	1.7
160°-170°	63.1	1.0
170°-180°	21.3	0.3
0°-30°	1046.9	16.9
0°-40°	1839.4	29.7
0°-60°	3572.3	57.7
0°-90°	4749.8	76.7
90°-120°	690.7	11.1
90°-150°	1257.9	20.3
90°-180°	1445.0	23.3
0°-180°	6195.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	598	642	722	817	847	55
15°	448	827	1394	1690	1743	125
25°	286	938	1660	1733	1735	132
35°	193	896	1563	1652	1717	121
45°	132	714	1382	1583	1654	102
55°	95	454	1172	1362	1400	86
65°	75	241	870	979	993	74
75°	55	148	478	525	527	58
85°	20	45	118	130	132	21
90°	2	4	11	6	6	3
95°	14	56	187	96	66	16
105°	52	78	316	480	447	55
115°	91	111	253	505	576	90
125°	127	143	230	389	459	113
135°	152	167	223	314	356	117
145°	176	187	220	268	289	110
155°	199	204	220	242	249	91
165°	214	217	220	229	232	61
175°	223	223	222	224	224	21
180°	223	223	223	223	223	



TEST NUMBER: P936487

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	613.8	613.8	613.8	613.8	613.8	613.8	613.8	613.8	613.8	613.8	613.8
2.5°	613.8	613.8	617.8	619.8	623.7	625.7	629.7	633.7	645.4	647.4	651.4
5°	598.1	606.0	631.7	641.5	669.1	706.7	722.4	748.1	801.4	817.2	827.1
7.5°	574.4	592.1	655.4	671.1	740.2	838.9	880.4	935.6	1020.5	1061.9	1095.5
10°	536.8	574.4	686.9	724.4	836.9	986.9	1063.9	1140.9	1269.2	1326.5	1348.2
12.5°	495.4	556.7	720.5	771.8	933.7	1152.8	1245.5	1330.4	1476.5	1553.5	1565.3
15°	448.1	531.0	752.1	827.1	1036.2	1290.9	1393.6	1498.2	1634.3	1689.6	1703.5
17.5°	406.7	511.2	781.7	860.6	1115.2	1415.3	1519.9	1606.7	1717.3	1754.8	1764.6
20°	355.3	479.7	801.4	904.1	1198.2	1506.1	1606.7	1673.9	1748.9	1772.6	1776.5
22.5°	317.8	446.1	813.2	919.8	1253.4	1561.3	1646.2	1699.5	1750.9	1758.7	1760.7
25°	286.3	408.6	811.2	937.6	1300.8	1594.9	1660.0	1699.5	1729.2	1733.0	1733.0
27.5°	256.6	367.1	803.4	941.5	1336.3	1602.8	1654.1	1681.7	1695.6	1703.5	1703.5
30°	231.0	327.7	783.7	933.7	1352.1	1594.9	1636.3	1650.2	1664.0	1675.8	1681.7
32.5°	211.3	290.1	754.0	917.8	1354.1	1575.2	1604.8	1612.6	1632.3	1660.0	1669.9
35°	193.4	252.7	720.5	896.1	1342.2	1543.6	1563.3	1571.2	1610.6	1652.2	1665.9
37.5°	175.7	225.0	677.1	858.7	1324.5	1506.1	1519.9	1533.7	1594.9	1644.2	1660.0
40°	157.9	201.3	625.7	817.2	1296.8	1460.6	1472.5	1494.2	1575.2	1632.3	1648.2
42.5°	144.1	181.6	570.4	773.8	1261.3	1409.3	1427.1	1458.6	1551.5	1612.6	1630.5
45°	132.3	161.8	511.2	714.5	1215.9	1356.1	1381.8	1425.2	1523.8	1583.0	1598.9
47.5°	120.4	148.0	450.1	653.4	1166.5	1302.8	1336.3	1385.6	1486.3	1543.6	1557.3
50°	110.6	134.3	388.8	588.2	1113.2	1245.5	1285.0	1336.3	1438.9	1492.2	1510.0
52.5°	102.7	122.4	331.6	523.1	1052.1	1186.3	1231.7	1285.0	1381.8	1433.0	1444.9
55°	94.7	112.5	282.3	454.0	988.9	1123.1	1172.5	1223.8	1318.5	1361.9	1369.9
57.5°	90.8	104.6	240.8	388.8	921.8	1052.1	1107.4	1154.8	1243.5	1277.1	1285.0
60°	84.9	98.7	209.3	333.6	848.8	984.9	1032.4	1079.7	1154.8	1182.4	1188.2
62.5°	79.0	94.7	185.6	280.3	773.8	906.0	953.4	996.8	1059.9	1079.7	1087.6
65°	75.0	90.8	167.8	240.8	696.8	823.1	870.5	908.0	959.3	979.1	983.0
67.5°	71.0	86.9	154.0	207.3	619.8	740.2	775.7	811.2	850.8	870.5	872.5
70°	65.1	82.9	142.1	183.6	540.8	645.4	675.1	712.5	744.1	754.0	759.9
72.5°	61.2	77.0	134.3	165.8	460.0	554.7	582.3	604.0	631.7	641.5	641.5
75°	55.3	69.1	126.3	148.0	377.0	454.0	477.7	499.4	521.1	525.1	519.1
77.5°	49.3	61.2	108.6	124.4	294.1	359.3	379.0	390.8	408.6	412.5	414.5
80°	41.4	53.3	84.9	96.7	213.1	264.5	278.3	288.1	304.0	304.0	308.0
82.5°	31.6	41.4	61.2	69.1	144.1	181.6	193.4	199.4	209.3	209.3	209.3
85°	19.7	25.7	39.4	45.4	86.9	110.6	118.4	120.4	128.3	130.3	130.3
87.5°	9.9	13.8	25.7	27.6	45.4	57.3	57.3	61.2	61.2	59.3	57.3
90°	1.5	2.7	3.9	4.2	6.6	9.8	11.4	10.1	7.6	5.7	5.7
92.5°	6.0	16.1	26.3	28.9	40.6	56.3	64.0	56.1	40.2	28.4	27.3
95°	14.3	33.0	51.6	56.3	99.9	158.1	187.1	167.0	126.7	96.5	93.1
97.5°	24.8	41.2	57.7	61.8	134.6	231.6	280.1	267.3	241.9	222.8	216.3
100°	33.0	47.8	62.7	66.4	147.2	254.9	308.7	309.6	311.4	312.8	305.1
102.5°	39.8	53.8	67.6	71.1	153.0	262.1	316.7	333.0	365.4	389.8	383.2
105°	51.5	63.2	75.0	78.0	157.3	262.9	315.8	352.2	425.0	479.6	476.0
107.5°	63.4	74.4	85.4	88.1	158.1	251.3	297.9	348.7	450.2	526.3	527.2
110°	71.5	81.5	91.3	93.8	156.9	240.9	283.0	339.7	453.2	538.2	541.9



TEST NUMBER: P936487

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	79.5	88.9	98.3	100.7	156.9	231.9	269.3	327.4	443.5	530.6	536.2
115°	91.4	100.2	108.9	111.1	158.4	221.4	253.0	309.0	420.8	504.7	512.6
117.5°	103.3	111.2	119.0	121.0	161.3	214.9	241.8	292.3	393.2	468.9	477.7
120°	110.2	117.6	125.0	126.9	163.7	212.8	237.3	283.5	375.7	444.9	453.5
122.5°	116.8	124.4	131.9	133.8	167.1	211.6	233.9	275.4	358.5	420.8	429.3
125°	127.2	134.1	140.9	142.6	171.8	210.8	230.2	265.4	336.1	388.9	396.7
127.5°	135.6	142.4	149.4	151.1	176.4	210.2	227.0	257.3	317.9	363.3	369.9
130°	140.0	147.5	154.9	156.8	179.8	210.5	225.8	252.8	306.7	347.1	353.2
132.5°	144.7	152.2	159.6	161.5	182.6	210.8	224.8	248.9	297.2	333.4	338.7
135°	151.6	158.4	165.1	166.8	185.6	210.6	223.0	243.2	283.7	313.9	318.6
137.5°	158.7	165.3	172.0	173.7	190.0	211.8	222.7	239.8	274.0	299.6	303.4
140°	164.4	170.6	176.8	178.4	192.8	212.0	221.6	236.4	265.9	288.0	291.6
142.5°	168.9	174.6	180.4	181.8	195.0	212.7	221.6	234.6	260.6	280.0	283.1
145°	175.8	180.8	185.8	187.0	198.1	212.7	220.1	230.7	251.9	267.8	270.1
147.5°	182.7	187.5	192.4	193.6	202.5	214.2	220.1	228.5	245.1	257.7	259.6
150°	187.1	191.5	196.0	197.1	204.8	215.0	220.1	227.2	241.2	251.8	253.4
152.5°	191.8	195.1	198.5	199.3	206.3	215.5	220.1	226.1	238.1	247.2	248.4
155°	198.7	201.2	203.7	204.3	209.6	216.6	220.1	224.9	234.5	241.6	242.4
157.5°	203.8	206.2	208.6	209.2	212.8	217.7	220.1	223.8	231.3	236.8	237.4
160°	207.3	209.2	211.0	211.5	214.3	218.2	220.1	223.3	229.7	234.5	234.8
162.5°	210.7	212.0	213.4	213.8	215.9	218.7	220.1	222.8	228.2	232.3	232.6
165°	214.4	215.6	216.9	217.2	218.2	219.5	220.1	222.0	225.9	228.8	229.1
167.5°	217.8	218.4	219.0	219.2	220.0	221.1	221.6	222.9	225.4	227.3	227.4
170°	220.1	220.7	221.3	221.4	221.5	221.6	221.6	222.9	225.4	227.3	227.3
172.5°	221.3	221.4	221.6	221.6	221.6	221.6	221.6	222.6	224.6	226.1	226.0
175°	223.0	223.0	223.0	223.0	222.5	221.9	221.6	222.2	223.5	224.5	224.5
177.5°	223.0	223.0	223.0	223.0	222.6	222.1	221.9	222.4	223.4	224.2	224.1
180°	223.0	223.0	223.0	223.0	223.0	223.0	223.0	223.0	223.0	223.0	223.0



TEST NUMBER: P936487

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	613.8	613.8
2.5°	655.4	651.4
5°	842.8	846.8
7.5°	1134.9	1133.0
10°	1411.3	1429.1
12.5°	1612.6	1616.6
15°	1735.0	1742.9
17.5°	1782.4	1784.3
20°	1784.3	1780.4
22.5°	1762.6	1758.7
25°	1737.0	1735.0
27.5°	1713.3	1715.3
30°	1703.5	1709.3
32.5°	1703.5	1713.3
35°	1707.4	1717.3
37.5°	1705.5	1717.3
40°	1697.5	1711.3
42.5°	1675.8	1685.7
45°	1642.3	1654.1
47.5°	1598.9	1606.7
50°	1543.6	1551.5
52.5°	1474.5	1476.5
55°	1391.6	1399.5
57.5°	1302.8	1304.8
60°	1204.1	1209.9
62.5°	1099.5	1099.5
65°	988.9	992.8
67.5°	874.4	884.2
70°	758.0	759.9
72.5°	643.5	643.5
75°	525.1	527.0
77.5°	412.5	412.5
80°	306.0	308.0
82.5°	211.3	215.1
85°	132.3	132.3
87.5°	61.2	55.3
90°	5.7	5.7
92.5°	22.7	18.2
95°	79.4	65.7
97.5°	190.2	164.1
100°	274.1	243.0
102.5°	356.6	330.0
105°	461.7	447.4
107.5°	530.6	534.1
110°	556.9	571.8





TEST NUMBER: P936487

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	559.2	582.1
115°	544.3	576.1
117.5°	512.9	548.1
120°	487.6	521.8
122.5°	462.9	496.6
125°	427.7	458.8
127.5°	396.1	422.3
130°	377.4	401.6
132.5°	360.5	382.2
135°	337.2	356.0
137.5°	318.7	334.0
140°	305.9	320.2
142.5°	295.3	307.7
145°	279.5	288.8
147.5°	267.3	275.0
150°	259.7	265.9
152.5°	253.1	257.9
155°	245.5	248.7
157.5°	239.6	241.8
160°	236.1	237.3
162.5°	233.8	235.0
165°	230.4	231.7
167.5°	228.0	228.5
170°	227.3	227.3
172.5°	225.5	225.1
175°	224.5	224.5
177.5°	223.5	223.0
180°	223.0	223.0



TEST NUMBER: P936487

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-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	7.77	9.00	8.45	9.71	10.53	20.93	22.17	21.61	22.87	23.70
	3H	8.50	9.61	9.19	10.33	11.19	22.79	23.91	23.49	24.62	25.48
	4H	8.81	9.87	9.53	10.59	11.47	23.45	24.51	24.16	25.23	26.10
	6H	9.08	10.06	9.81	10.80	11.68	23.90	24.87	24.62	25.61	26.50
	8H	9.16	10.09	9.90	10.85	11.74	24.03	24.96	24.76	25.71	26.60
	12H	9.19	10.08	9.94	10.83	11.75	24.11	24.99	24.85	25.74	26.66
4H	2H	15.02	16.07	15.73	16.80	17.67	21.25	22.30	21.97	23.03	23.90
	3H	16.62	17.50	17.35	18.27	19.16	23.32	24.21	24.05	24.97	25.86
	4H	16.73	17.54	17.48	18.30	19.22	24.10	24.91	24.85	25.67	26.59
	6H	16.76	17.47	17.53	18.25	19.18	24.66	25.36	25.42	26.15	27.08
	8H	16.75	17.41	17.52	18.19	19.13	24.83	25.49	25.60	26.27	27.21
	12H	16.73	17.32	17.52	18.13	19.07	24.94	25.53	25.73	26.34	27.29
8H	4H	18.20	18.86	18.97	19.65	20.59	24.20	24.85	24.96	25.64	26.58
	6H	18.46	19.01	19.26	19.84	20.78	24.84	25.39	25.64	26.21	27.15
	8H	18.49	18.97	19.30	19.80	20.76	25.06	25.55	25.87	26.37	27.33
	12H	18.47	18.90	19.29	19.72	20.73	25.22	25.65	26.03	26.47	27.48
12H	4H	18.36	18.96	19.15	19.76	20.71	24.17	24.76	24.96	25.57	26.51
	6H	18.73	19.21	19.53	20.04	21.00	24.83	25.32	25.64	26.14	27.10
	8H	18.81	19.24	19.63	20.06	21.07	25.07	25.50	25.89	26.32	27.33