

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: P936566

Luminaire Tested: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

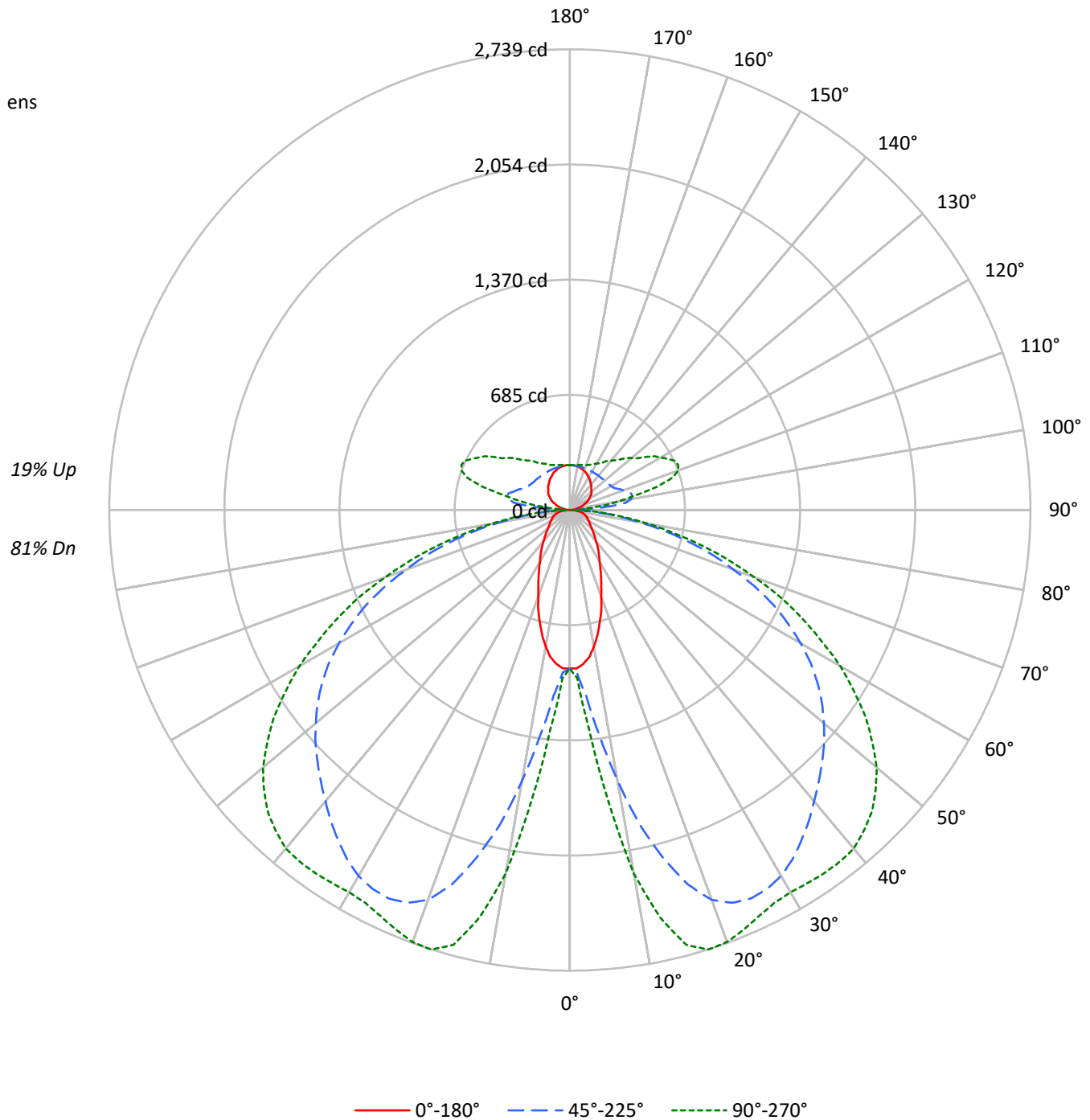
Test Method: LM-79-2019  
Report Number: P936566  
REPORT IS A COMBINATION OF REPORTS P933456 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9023.8 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 99.2  
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

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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	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°	4372	4372	4372
5°	4271	5054	5877
10°	3874	7367	9744
15°	3293	9624	11765
20°	2681	11153	11990
25°	2236	11671	11747
30°	1886	11745	11725
35°	1668	11550	12028
40°	1453	11297	12342
45°	1316	11111	12390
50°	1207	10944	12185
55°	1156	10699	11645
60°	1183	10229	10792
65°	1231	9515	9620
70°	1311	8298	8127
75°	1454	6766	6342
80°	1589	4691	4273
85°	1411	2489	2188

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12390 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.9	1.4
10°-20°	540.3	6.0
20°-30°	945.0	10.5
30°-40°	1216.6	13.5
40°-50°	1358.9	15.1
50°-60°	1301.5	14.4
60°-70°	1031.4	11.4
70°-80°	606.5	6.7
80°-90°	169.5	1.9
90°-100°	130.2	1.4
100°-110°	342.5	3.8
110°-120°	355.1	3.9
120°-130°	284.8	3.2
130°-140°	223.5	2.5
140°-150°	171.5	1.9
150°-160°	123.5	1.4
160°-170°	75.6	0.8
170°-180°	25.5	0.3
0°-30°	1607.2	17.8
0°-40°	2823.8	31.3
0°-60°	5484.1	60.8
0°-90°	7291.5	80.8
90°-120°	827.8	9.2
90°-150°	1507.7	16.7
90°-180°	1732.0	19.2
0°-180°	9023.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	918	985	1109	1254	1300	85
15°	688	1270	2139	2594	2676	191
25°	439	1439	2548	2661	2664	202
35°	297	1376	2400	2536	2636	185
45°	203	1097	2121	2430	2539	157
55°	146	697	1800	2091	2148	133
65°	115	370	1336	1503	1524	114
75°	85	227	733	806	809	89
85°	30	70	182	200	203	32
90°	2	5	14	7	7	4
95°	17	67	224	116	79	19
105°	62	94	379	575	536	65
115°	110	133	303	605	690	108
125°	152	171	276	466	550	135
135°	182	200	267	376	427	141
145°	211	224	264	321	346	132
155°	238	245	264	290	298	109
165°	257	260	264	274	278	73
175°	267	267	266	269	269	25
180°	267	267	267	267	267	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4
2.5°	942.4	942.4	948.5	951.5	957.5	960.6	966.7	972.8	990.9	994.0	1000.0
5°	918.1	930.3	969.7	984.8	1027.3	1084.8	1109.1	1148.5	1230.2	1254.5	1269.6
7.5°	881.8	909.1	1006.1	1030.3	1136.3	1287.9	1351.5	1436.3	1566.6	1630.3	1681.8
10°	824.2	881.8	1054.5	1112.1	1284.9	1515.1	1633.3	1751.5	1948.5	2036.4	2069.7
12.5°	760.6	854.6	1106.1	1184.9	1433.3	1769.7	1912.1	2042.4	2266.7	2384.8	2403.0
15°	687.9	815.2	1154.5	1269.6	1590.9	1981.8	2139.3	2300.0	2509.1	2593.9	2615.1
17.5°	624.2	784.8	1200.0	1321.2	1712.1	2172.7	2333.3	2466.7	2636.3	2693.9	2709.0
20°	545.4	736.4	1230.2	1387.8	1839.4	2312.1	2466.7	2569.6	2684.9	2721.2	2727.2
22.5°	487.9	684.8	1248.5	1412.1	1924.2	2396.9	2527.3	2609.0	2687.8	2700.0	2703.0
25°	439.4	627.3	1245.5	1439.4	1997.0	2448.5	2548.5	2609.0	2654.5	2660.6	2660.6
27.5°	393.9	563.6	1233.3	1445.5	2051.5	2460.6	2539.4	2581.8	2603.0	2615.1	2615.1
30°	354.5	503.0	1203.0	1433.3	2075.8	2448.5	2512.1	2533.3	2554.5	2572.7	2581.8
32.5°	324.3	445.4	1157.5	1409.0	2078.7	2418.1	2463.6	2475.7	2506.1	2548.5	2563.6
35°	297.0	387.8	1106.1	1375.7	2060.6	2369.7	2400.0	2412.1	2472.7	2536.3	2557.5
37.5°	269.7	345.4	1039.4	1318.2	2033.3	2312.1	2333.3	2354.5	2448.5	2524.2	2548.5
40°	242.5	309.1	960.6	1254.5	1990.9	2242.4	2260.6	2293.9	2418.1	2506.1	2530.2
42.5°	221.2	278.8	875.8	1187.9	1936.4	2163.6	2190.9	2239.4	2381.8	2475.7	2503.0
45°	203.1	248.4	784.8	1096.9	1866.6	2081.8	2121.2	2187.9	2339.4	2430.3	2454.5
47.5°	184.9	227.2	690.9	1003.0	1790.9	1999.9	2051.5	2127.3	2281.8	2369.7	2390.9
50°	169.7	206.1	597.0	903.0	1709.1	1912.1	1972.7	2051.5	2209.1	2290.9	2318.1
52.5°	157.6	187.8	509.1	803.0	1615.1	1821.2	1890.9	1972.7	2121.2	2200.0	2218.1
55°	145.5	172.7	433.3	697.0	1518.2	1724.2	1800.0	1878.8	2024.2	2090.9	2103.0
57.5°	139.4	160.6	369.7	597.0	1415.1	1615.1	1700.0	1772.7	1909.1	1960.6	1972.7
60°	130.3	151.5	321.2	512.1	1303.0	1512.1	1584.8	1657.6	1772.7	1815.2	1824.2
62.5°	121.2	145.5	284.9	430.3	1187.9	1390.9	1463.7	1530.3	1627.2	1657.6	1669.7
65°	115.1	139.4	257.6	369.7	1069.7	1263.6	1336.3	1393.9	1472.7	1503.0	1509.0
67.5°	109.0	133.3	236.4	318.2	951.5	1136.3	1190.9	1245.5	1306.1	1336.3	1339.4
70°	100.0	127.3	218.2	281.8	830.3	990.9	1036.3	1093.9	1142.4	1157.5	1166.7
72.5°	93.9	118.2	206.1	254.5	706.0	851.5	894.0	927.3	969.7	984.8	984.8
75°	84.9	106.1	193.9	227.2	578.8	697.0	733.4	766.7	800.0	806.0	797.0
77.5°	75.7	93.9	166.7	190.9	451.5	551.5	581.8	600.0	627.3	633.3	636.4
80°	63.7	81.8	130.3	148.4	327.2	406.0	427.2	442.5	466.6	466.6	472.7
82.5°	48.5	63.7	93.9	106.1	221.2	278.8	297.0	306.0	321.2	321.2	321.2
85°	30.3	39.4	60.6	69.7	133.3	169.7	181.8	184.9	197.0	200.0	200.0
87.5°	15.1	21.2	39.4	42.4	69.7	87.9	87.9	93.9	93.9	90.9	87.9
90°	1.8	3.2	4.7	5.0	7.9	11.7	13.6	12.1	9.0	6.8	6.8
92.5°	7.2	19.3	31.6	34.6	48.7	67.4	76.7	67.2	48.3	34.1	32.8
95°	17.2	39.5	61.9	67.4	119.7	189.4	224.4	200.2	151.9	115.7	111.6
97.5°	29.8	49.5	69.1	74.0	161.2	277.5	335.7	320.5	290.0	267.1	259.3
100°	39.5	57.3	75.1	79.6	176.4	305.4	369.9	371.1	373.3	375.0	365.7
102.5°	47.7	64.4	81.0	85.1	183.4	314.3	379.7	399.1	438.0	467.2	459.2
105°	61.7	75.8	90.0	93.5	188.6	315.2	378.6	422.2	509.4	574.8	570.5
107.5°	76.0	89.2	102.3	105.6	189.4	301.2	357.1	417.8	539.5	630.7	631.8
110°	85.8	97.6	109.5	112.5	188.0	288.7	339.1	407.1	543.1	645.1	649.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	95.3	106.5	117.8	120.7	188.1	277.9	322.8	392.4	531.5	635.9	642.8
115°	109.6	120.0	130.4	133.0	189.8	265.5	303.2	370.3	504.4	605.0	614.5
117.5°	123.7	133.2	142.7	145.1	193.4	257.7	289.8	350.3	471.3	562.1	572.6
120°	132.0	140.9	149.9	152.1	196.3	255.1	284.4	339.7	450.3	533.2	543.4
122.5°	140.0	149.1	158.1	160.4	200.4	253.6	280.3	330.1	429.7	504.3	514.4
125°	152.5	160.7	168.9	170.9	205.9	252.6	275.8	318.1	402.7	466.1	475.4
127.5°	162.5	170.7	179.1	181.1	211.5	251.9	272.1	308.4	381.0	435.5	443.4
130°	167.9	176.8	185.7	187.9	215.5	252.3	270.7	303.0	367.6	416.1	423.3
132.5°	173.4	182.4	191.2	193.5	218.8	252.6	269.4	298.3	356.2	399.6	406.1
135°	181.7	189.8	198.0	200.0	222.4	252.3	267.3	291.5	339.9	376.3	381.9
137.5°	190.1	198.1	206.2	208.2	227.8	253.8	266.9	287.4	328.3	359.0	363.6
140°	197.1	204.5	211.9	213.8	231.1	254.1	265.6	283.4	318.7	345.2	349.5
142.5°	202.5	209.3	216.2	217.9	233.9	255.1	265.6	281.2	312.3	335.6	339.2
145°	210.8	216.8	222.7	224.2	237.4	255.1	263.8	276.6	302.0	321.1	323.8
147.5°	219.0	224.8	230.6	232.1	242.6	256.8	263.8	273.9	293.8	308.8	311.1
150°	224.4	229.6	234.8	236.2	245.4	257.7	263.8	272.3	289.2	301.8	303.7
152.5°	229.9	233.9	237.9	238.9	247.2	258.3	263.8	271.0	285.4	296.3	297.7
155°	238.2	241.1	244.1	244.8	251.1	259.6	263.8	269.6	281.0	289.6	290.5
157.5°	244.2	247.1	250.0	250.7	255.1	260.9	263.8	268.3	277.2	283.9	284.5
160°	248.4	250.6	252.8	253.4	256.9	261.5	263.8	267.7	275.3	281.0	281.4
162.5°	252.5	254.2	255.8	256.2	258.7	262.1	263.8	267.1	273.5	278.4	278.7
165°	257.0	258.6	260.1	260.4	261.6	263.1	263.8	266.2	270.7	274.2	274.6
167.5°	261.2	261.9	262.6	262.8	263.8	265.0	265.6	267.2	270.2	272.4	272.6
170°	263.8	264.6	265.3	265.5	265.5	265.6	265.6	267.2	270.2	272.4	272.4
172.5°	265.3	265.5	265.6	265.6	265.6	265.6	265.6	266.8	269.2	271.0	270.8
175°	267.3	267.3	267.3	267.3	266.7	266.0	265.6	266.4	267.9	269.0	269.0
177.5°	267.3	267.3	267.3	267.3	266.8	266.3	266.0	266.6	267.8	268.7	268.5
180°	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	942.4	942.4
2.5°	1006.1	1000.0
5°	1293.9	1300.0
7.5°	1742.4	1739.4
10°	2166.7	2194.0
12.5°	2475.7	2481.8
15°	2663.6	2675.7
17.5°	2736.3	2739.4
20°	2739.4	2733.3
22.5°	2706.1	2700.0
25°	2666.7	2663.6
27.5°	2630.2	2633.3
30°	2615.1	2624.2
32.5°	2615.1	2630.2
35°	2621.2	2636.3
37.5°	2618.2	2636.3
40°	2606.1	2627.3
42.5°	2572.7	2587.9
45°	2521.2	2539.4
47.5°	2454.5	2466.7
50°	2369.7	2381.8
52.5°	2263.6	2266.7
55°	2136.3	2148.5
57.5°	1999.9	2003.0
60°	1848.5	1857.6
62.5°	1687.8	1687.8
65°	1518.2	1524.3
67.5°	1342.4	1357.6
70°	1163.6	1166.7
72.5°	987.9	987.9
75°	806.0	809.1
77.5°	633.3	633.3
80°	469.7	472.7
82.5°	324.3	330.3
85°	203.1	203.1
87.5°	93.9	84.9
90°	6.8	6.8
92.5°	27.3	21.8
95°	95.2	78.7
97.5°	227.9	196.7
100°	328.5	291.2
102.5°	427.3	395.5
105°	553.4	536.2
107.5°	635.9	640.1
110°	667.4	685.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	670.2	697.6
115°	652.5	690.5
117.5°	614.8	657.0
120°	584.4	625.4
122.5°	554.8	595.2
125°	512.7	549.9
127.5°	474.7	506.1
130°	452.3	481.3
132.5°	432.1	458.0
135°	404.2	426.6
137.5°	381.9	400.3
140°	366.6	383.8
142.5°	354.0	368.7
145°	335.0	346.1
147.5°	320.3	329.7
150°	311.2	318.7
152.5°	303.3	309.0
155°	294.3	298.0
157.5°	287.2	289.8
160°	282.9	284.4
162.5°	280.1	281.6
165°	276.1	277.6
167.5°	273.2	273.9
170°	272.4	272.4
172.5°	270.3	269.8
175°	269.0	269.0
177.5°	267.9	267.3
180°	267.3	267.3



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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	8.56	9.86	9.19	10.51	11.26	21.73	23.04	22.37	23.69	24.43
	3H	9.29	10.47	9.94	11.13	11.91	23.60	24.78	24.25	25.44	26.22
	4H	9.61	10.72	10.27	11.40	12.19	24.27	25.38	24.93	26.05	26.85
	6H	9.88	10.91	10.56	11.60	12.41	24.72	25.75	25.40	26.44	27.25
	8H	9.96	10.95	10.65	11.65	12.47	24.86	25.84	25.54	26.54	27.36
	12H	10.00	10.94	10.69	11.64	12.48	24.94	25.88	25.64	26.58	27.42
4H	2H	15.82	16.93	16.49	17.61	18.40	22.06	23.17	22.73	23.84	24.64
	3H	17.43	18.36	18.11	19.07	19.89	24.14	25.08	24.82	25.79	26.60
	4H	17.54	18.39	18.24	19.11	19.95	24.93	25.78	25.63	26.49	27.34
	6H	17.58	18.32	18.29	19.06	19.91	25.50	26.24	26.21	26.98	27.83
	8H	17.57	18.26	18.29	19.00	19.86	25.67	26.36	26.39	27.10	27.97
	12H	17.55	18.17	18.29	18.93	19.80	25.78	26.41	26.53	27.17	28.04
8H	4H	19.02	19.72	19.75	20.45	21.32	25.03	25.72	25.75	26.46	27.32
	6H	19.29	19.87	20.04	20.64	21.51	25.68	26.26	26.43	27.03	27.90
	8H	19.31	19.83	20.08	20.61	21.49	25.90	26.42	26.67	27.20	28.08
	12H	19.30	19.76	20.07	20.53	21.47	26.07	26.53	26.84	27.30	28.24
12H	4H	19.19	19.82	19.93	20.58	21.45	25.00	25.63	25.75	26.39	27.26
	6H	19.55	20.07	20.32	20.85	21.73	25.67	26.18	26.43	26.96	27.85
	8H	19.64	20.10	20.41	20.87	21.81	25.92	26.37	26.69	27.14	28.09