

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: P936594

Luminaire Tested: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

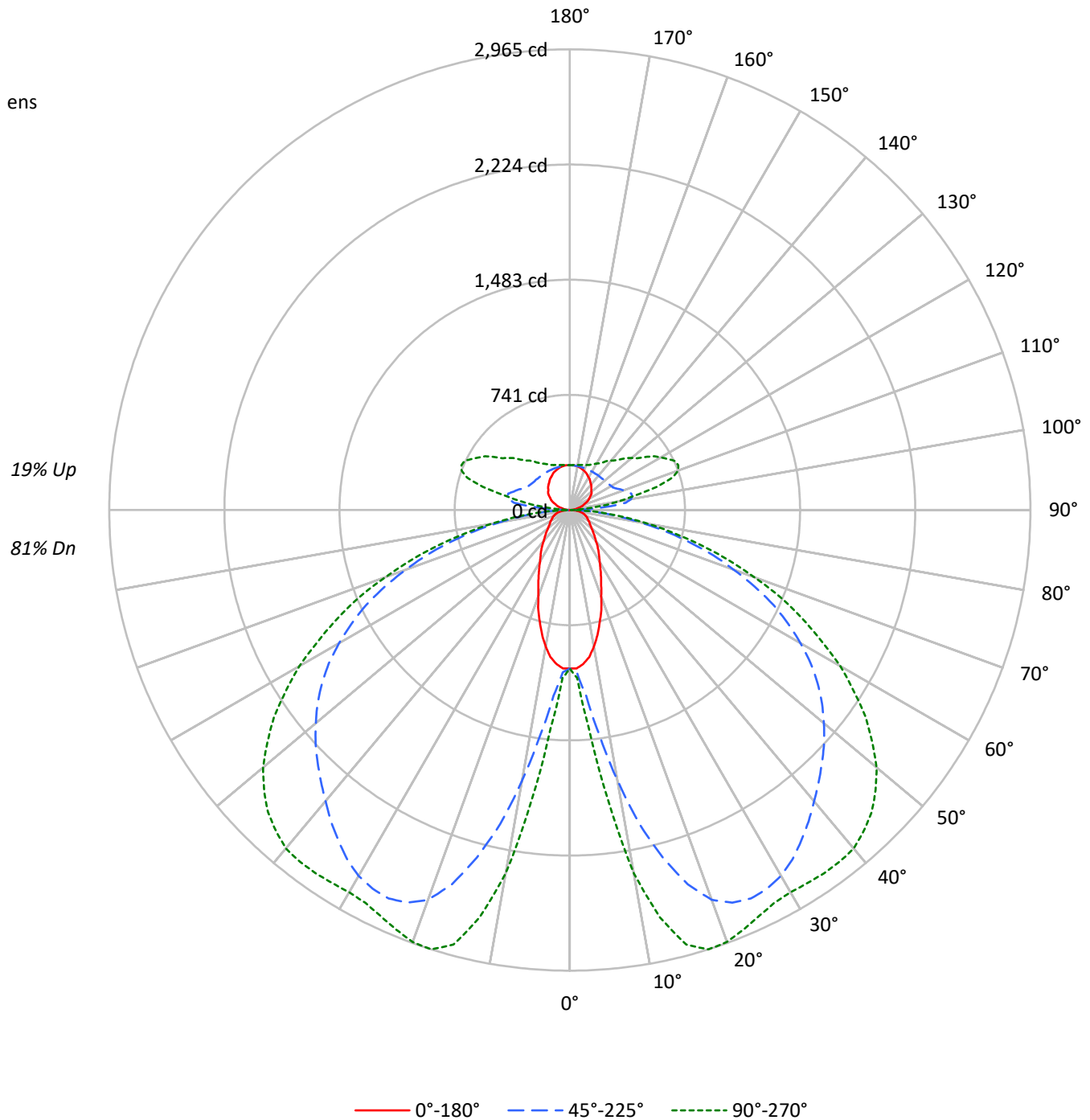
Test Method: LM-79-2019  
Report Number: P936594  
REPORT IS A COMBINATION OF REPORTS P933456 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9766.6 lumens  
Efficiency: N/A  
Efficacy: 98.5 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

TEST NUMBER: P936594  
CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P936594

CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

**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	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	16

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

	0°	45°	90°
0°	4732	4732	4732
5°	4623	5470	6361
10°	4194	7973	10546
15°	3564	10416	12734
20°	2901	12071	12977
25°	2421	12632	12714
30°	2041	12711	12690
35°	1805	12500	13018
40°	1573	12226	13357
45°	1424	12025	13409
50°	1306	11844	13187
55°	1252	11580	12603
60°	1281	11071	11680
65°	1332	10298	10412
70°	1419	8981	8796
75°	1574	7323	6864
80°	1719	5078	4625
85°	1528	2695	2368

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13409 cd/sqm



TEST NUMBER: P936594

CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.9	1.4
10°-20°	584.8	6.0
20°-30°	1022.8	10.5
30°-40°	1316.7	13.5
40°-50°	1470.7	15.1
50°-60°	1408.6	14.4
60°-70°	1116.3	11.4
70°-80°	656.4	6.7
80°-90°	183.5	1.9
90°-100°	141.0	1.4
100°-110°	370.6	3.8
110°-120°	384.3	3.9
120°-130°	308.3	3.2
130°-140°	241.9	2.5
140°-150°	185.7	1.9
150°-160°	133.7	1.4
160°-170°	81.8	0.8
170°-180°	27.6	0.3
0°-30°	1739.5	17.8
0°-40°	3056.2	31.3
0°-60°	5935.5	60.8
0°-90°	7891.7	80.8
90°-120°	895.9	9.2
90°-150°	1631.8	16.7
90°-180°	1875.0	19.2
0°-180°	9766.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	994	1066	1200	1358	1407	92
15°	744	1374	2315	2807	2896	207
25°	476	1558	2758	2880	2883	219
35°	321	1489	2598	2745	2853	201
45°	220	1187	2296	2630	2748	170
55°	158	754	1948	2263	2325	143
65°	125	400	1446	1627	1650	123
75°	92	246	794	872	876	96
85°	33	75	197	216	220	35
90°	2	5	15	7	7	4
95°	19	73	243	125	85	21
105°	67	101	410	622	580	71
115°	119	144	328	655	747	117
125°	165	185	298	504	595	146
135°	197	216	289	407	462	152
145°	228	243	286	348	375	143
155°	258	265	286	314	323	118
165°	278	282	286	297	300	79
175°	289	289	288	291	291	27
180°	289	289	289	289	289	



TEST NUMBER: P936594

CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0
2.5°	1020.0	1020.0	1026.6	1029.9	1036.3	1039.6	1046.2	1052.8	1072.5	1075.8	1082.3
5°	993.7	1006.9	1049.5	1065.9	1111.8	1174.1	1200.4	1243.0	1331.5	1357.8	1374.1
7.5°	954.4	983.9	1088.9	1115.1	1229.9	1393.9	1462.7	1554.6	1695.6	1764.5	1820.3
10°	892.1	954.4	1141.3	1203.6	1390.6	1639.8	1767.7	1895.7	2108.8	2204.0	2240.0
12.5°	823.2	924.9	1197.1	1282.4	1551.3	1915.3	2069.5	2210.5	2453.2	2581.1	2600.8
15°	744.5	882.3	1249.5	1374.1	1721.8	2144.9	2315.4	2489.3	2715.6	2807.4	2830.4
17.5°	675.6	849.4	1298.8	1430.0	1853.0	2351.6	2525.3	2669.7	2853.3	2915.6	2932.0
20°	590.3	797.0	1331.5	1502.0	1990.8	2502.4	2669.7	2781.1	2905.8	2945.2	2951.7
22.5°	528.0	741.2	1351.3	1528.3	2082.6	2594.2	2735.3	2823.8	2909.0	2922.2	2925.5
25°	475.6	678.9	1348.0	1557.9	2161.4	2650.0	2758.3	2823.8	2873.0	2879.6	2879.6
27.5°	426.4	610.0	1334.8	1564.5	2220.4	2663.1	2748.4	2794.3	2817.3	2830.4	2830.4
30°	383.7	544.4	1302.0	1551.3	2246.6	2650.0	2718.8	2741.8	2764.8	2784.4	2794.3
32.5°	351.0	482.1	1252.8	1525.0	2249.8	2617.2	2666.4	2679.5	2712.3	2758.3	2774.6
35°	321.4	419.8	1197.1	1489.0	2230.2	2564.7	2597.5	2610.6	2676.2	2745.1	2768.0
37.5°	291.9	373.8	1124.9	1426.7	2200.7	2502.4	2525.3	2548.3	2650.0	2732.0	2758.3
40°	262.4	334.5	1039.6	1357.8	2154.8	2427.0	2446.6	2482.7	2617.2	2712.3	2738.5
42.5°	239.4	301.7	947.9	1285.7	2095.8	2341.7	2371.2	2423.7	2577.8	2679.5	2709.0
45°	219.8	268.9	849.4	1187.2	2020.3	2253.1	2295.8	2367.9	2531.9	2630.4	2656.5
47.5°	200.1	245.9	747.8	1085.6	1938.3	2164.6	2220.4	2302.3	2469.6	2564.7	2587.7
50°	183.6	223.1	646.1	977.3	1849.7	2069.5	2135.1	2220.4	2390.9	2479.5	2508.9
52.5°	170.5	203.3	551.0	869.1	1748.1	1971.0	2046.5	2135.1	2295.8	2381.0	2400.7
55°	157.5	186.9	469.0	754.4	1643.1	1866.1	1948.2	2033.4	2190.8	2263.0	2276.1
57.5°	150.9	173.8	400.1	646.1	1531.6	1748.1	1839.9	1918.6	2066.2	2121.9	2135.1
60°	141.0	164.0	347.7	554.3	1410.3	1636.5	1715.2	1794.0	1918.6	1964.6	1974.3
62.5°	131.2	157.5	308.3	465.7	1285.7	1505.3	1584.1	1656.2	1761.2	1794.0	1807.1
65°	124.6	150.9	278.8	400.1	1157.8	1367.6	1446.3	1508.6	1593.9	1626.8	1633.2
67.5°	118.0	144.3	255.8	344.4	1029.9	1229.9	1288.9	1348.0	1413.6	1446.3	1449.6
70°	108.2	137.8	236.1	305.0	898.7	1072.5	1121.6	1183.9	1236.4	1252.8	1262.7
72.5°	101.6	127.9	223.1	275.5	764.2	921.6	967.5	1003.6	1049.5	1065.9	1065.9
75°	91.9	114.8	209.9	245.9	626.5	754.4	793.7	829.8	865.8	872.4	862.6
77.5°	82.0	101.6	180.4	206.6	488.7	596.9	629.7	649.4	678.9	685.5	688.8
80°	68.9	88.6	141.0	160.7	354.2	439.4	462.4	478.9	505.0	505.0	511.6
82.5°	52.5	68.9	101.6	114.8	239.4	301.7	321.4	331.2	347.7	347.7	347.7
85°	32.8	42.6	65.6	75.4	144.3	183.6	196.8	200.1	213.2	216.5	216.5
87.5°	16.4	23.0	42.6	45.9	75.4	95.2	95.2	101.6	101.6	98.4	95.2
90°	1.9	3.5	5.0	5.4	8.5	12.7	14.7	13.1	9.8	7.4	7.4
92.5°	7.8	20.9	34.2	37.5	52.7	73.0	83.0	72.8	52.3	36.9	35.5
95°	18.6	42.7	67.0	73.0	129.6	205.0	242.8	216.7	164.4	125.2	120.7
97.5°	32.3	53.6	74.8	80.1	174.5	300.4	363.4	346.9	313.9	289.1	280.6
100°	42.7	62.0	81.3	86.1	190.9	330.5	400.4	401.7	404.1	405.9	395.8
102.5°	51.6	69.7	87.7	92.2	198.5	340.1	411.0	432.0	474.0	505.6	497.0
105°	66.8	82.1	97.4	101.2	204.1	341.2	409.8	457.0	551.4	622.1	617.4
107.5°	82.3	96.5	110.8	114.3	205.0	326.0	386.4	452.2	583.9	682.7	683.8
110°	92.8	105.6	118.5	121.7	203.5	312.5	367.1	440.6	587.8	698.2	703.0



TEST NUMBER: P936594

CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	103.1	115.3	127.5	130.6	203.6	300.8	349.4	424.7	575.3	688.3	695.7
115°	118.6	129.8	141.2	144.0	205.4	287.3	328.2	400.8	545.9	654.8	665.0
117.5°	133.9	144.2	154.5	157.1	209.3	278.9	313.7	379.2	510.1	608.3	619.8
120°	142.8	152.5	162.2	164.6	212.4	276.1	307.9	367.6	487.3	577.0	588.1
122.5°	151.6	161.3	171.1	173.5	216.9	274.5	303.4	357.3	465.0	545.8	556.8
125°	165.0	173.9	182.8	185.0	222.9	273.4	298.5	344.3	435.9	504.5	514.5
127.5°	175.9	184.8	193.8	196.0	228.9	272.6	294.5	333.8	412.4	471.3	479.8
130°	181.7	191.4	201.0	203.4	233.2	273.1	292.9	327.9	397.9	450.3	458.1
132.5°	187.7	197.4	207.0	209.4	236.8	273.4	291.6	322.9	385.5	432.5	439.5
135°	196.6	205.4	214.2	216.5	240.7	273.1	289.2	315.5	367.9	407.3	413.3
137.5°	205.7	214.4	223.2	225.4	246.5	274.7	288.9	311.0	355.3	388.6	393.5
140°	213.3	221.3	229.4	231.4	250.1	275.0	287.5	306.7	345.0	373.6	378.3
142.5°	219.2	226.6	234.0	235.9	253.1	276.1	287.5	304.4	338.0	363.2	367.2
145°	228.1	234.6	241.0	242.6	257.0	276.1	285.6	299.3	326.8	347.5	350.5
147.5°	237.0	243.3	249.6	251.2	262.6	277.9	285.6	296.4	318.0	334.2	336.7
150°	242.8	248.5	254.2	255.6	265.6	278.9	285.6	294.7	313.0	326.6	328.7
152.5°	248.8	253.1	257.5	258.5	267.5	279.6	285.6	293.3	308.9	320.6	322.2
155°	257.8	261.0	264.1	264.9	271.8	281.0	285.6	291.8	304.2	313.5	314.4
157.5°	264.3	267.4	270.5	271.3	276.1	282.4	285.6	290.4	300.0	307.3	307.9
160°	268.8	271.2	273.6	274.2	278.0	283.0	285.6	289.7	298.0	304.2	304.6
162.5°	273.3	275.1	276.8	277.3	280.0	283.7	285.6	289.1	296.0	301.3	301.6
165°	278.2	279.8	281.5	281.9	283.1	284.8	285.6	288.1	293.0	296.8	297.2
167.5°	282.7	283.4	284.2	284.4	285.5	286.8	287.5	289.1	292.4	294.9	295.1
170°	285.6	286.3	287.1	287.3	287.4	287.5	287.5	289.1	292.4	294.9	294.9
172.5°	287.1	287.3	287.5	287.5	287.5	287.5	287.5	288.8	291.4	293.3	293.1
175°	289.2	289.2	289.2	289.2	288.7	287.9	287.5	288.3	289.9	291.2	291.2
177.5°	289.2	289.2	289.2	289.2	288.8	288.2	287.9	288.6	289.8	290.8	290.6
180°	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2



TEST NUMBER: P936594

CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1020.0	1020.0
2.5°	1088.9	1082.3
5°	1400.4	1407.0
7.5°	1885.8	1882.6
10°	2345.0	2374.5
12.5°	2679.5	2686.1
15°	2882.9	2896.0
17.5°	2961.6	2964.8
20°	2964.8	2958.3
22.5°	2928.8	2922.2
25°	2886.2	2882.9
27.5°	2846.7	2850.0
30°	2830.4	2840.2
32.5°	2830.4	2846.7
35°	2836.9	2853.3
37.5°	2833.6	2853.3
40°	2820.6	2843.5
42.5°	2784.4	2800.9
45°	2728.7	2748.4
47.5°	2656.5	2669.7
50°	2564.7	2577.8
52.5°	2449.9	2453.2
55°	2312.1	2325.3
57.5°	2164.6	2167.8
60°	2000.6	2010.5
62.5°	1826.8	1826.8
65°	1643.1	1649.7
67.5°	1452.9	1469.3
70°	1259.4	1262.7
72.5°	1069.2	1069.2
75°	872.4	875.7
77.5°	685.5	685.5
80°	508.3	511.6
82.5°	351.0	357.5
85°	219.8	219.8
87.5°	101.6	91.9
90°	7.4	7.4
92.5°	29.6	23.6
95°	103.0	85.2
97.5°	246.7	212.9
100°	355.5	315.2
102.5°	462.5	428.0
105°	598.9	580.3
107.5°	688.3	692.7
110°	722.3	741.7





TEST NUMBER: P936594

CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	725.4	755.0
115°	706.2	747.3
117.5°	665.4	711.1
120°	632.5	676.8
122.5°	600.5	644.2
125°	554.8	595.2
127.5°	513.8	547.8
130°	489.5	520.9
132.5°	467.6	495.7
135°	437.5	461.7
137.5°	413.4	433.2
140°	396.8	415.4
142.5°	383.1	399.0
145°	362.6	374.6
147.5°	346.7	356.8
150°	336.8	345.0
152.5°	328.3	334.4
155°	318.5	322.6
157.5°	310.9	313.7
160°	306.2	307.9
162.5°	303.2	304.8
165°	298.8	300.5
167.5°	295.7	296.4
170°	294.9	294.9
172.5°	292.5	292.0
175°	291.2	291.2
177.5°	289.9	289.2
180°	289.2	289.2



TEST NUMBER: P936594

CATALOG NUMBER: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-3500K

**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	8.83	10.13	9.46	10.78	11.53	22.01	23.31	22.64	23.96	24.71
	3H	9.57	10.74	10.21	11.40	12.19	23.88	25.06	24.52	25.72	26.50
	4H	9.88	11.00	10.55	11.67	12.46	24.54	25.66	25.21	26.33	27.12
	6H	10.16	11.19	10.84	11.87	12.68	25.00	26.03	25.68	26.71	27.52
	8H	10.24	11.22	10.93	11.93	12.74	25.13	26.12	25.82	26.82	27.63
	12H	10.27	11.21	10.97	11.91	12.75	25.21	26.16	25.91	26.85	27.70
4H	2H	16.10	17.21	16.76	17.88	18.68	22.33	23.45	23.00	24.12	24.91
	3H	17.70	18.64	18.38	19.35	20.16	24.42	25.35	25.10	26.06	26.88
	4H	17.82	18.67	18.51	19.38	20.23	25.20	26.06	25.90	26.77	27.61
	6H	17.85	18.60	18.57	19.33	20.19	25.77	26.51	26.49	27.25	28.10
	8H	17.84	18.54	18.56	19.27	20.14	25.94	26.64	26.67	27.37	28.24
	12H	17.82	18.45	18.56	19.21	20.08	26.06	26.69	26.80	27.45	28.32
8H	4H	19.30	19.99	20.02	20.73	21.60	25.30	26.00	26.02	26.73	27.60
	6H	19.56	20.14	20.31	20.92	21.79	25.95	26.53	26.70	27.31	28.18
	8H	19.59	20.10	20.35	20.88	21.77	26.18	26.70	26.94	27.47	28.36
	12H	19.58	20.03	20.34	20.80	21.74	26.35	26.80	27.11	27.57	28.51
12H	4H	19.47	20.09	20.21	20.85	21.72	25.28	25.90	26.02	26.66	27.54
	6H	19.83	20.34	20.59	21.12	22.01	25.94	26.46	26.71	27.24	28.12
	8H	19.92	20.37	20.69	21.14	22.09	26.19	26.65	26.96	27.42	28.36