

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: P937372

Luminaire Tested: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937372  
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

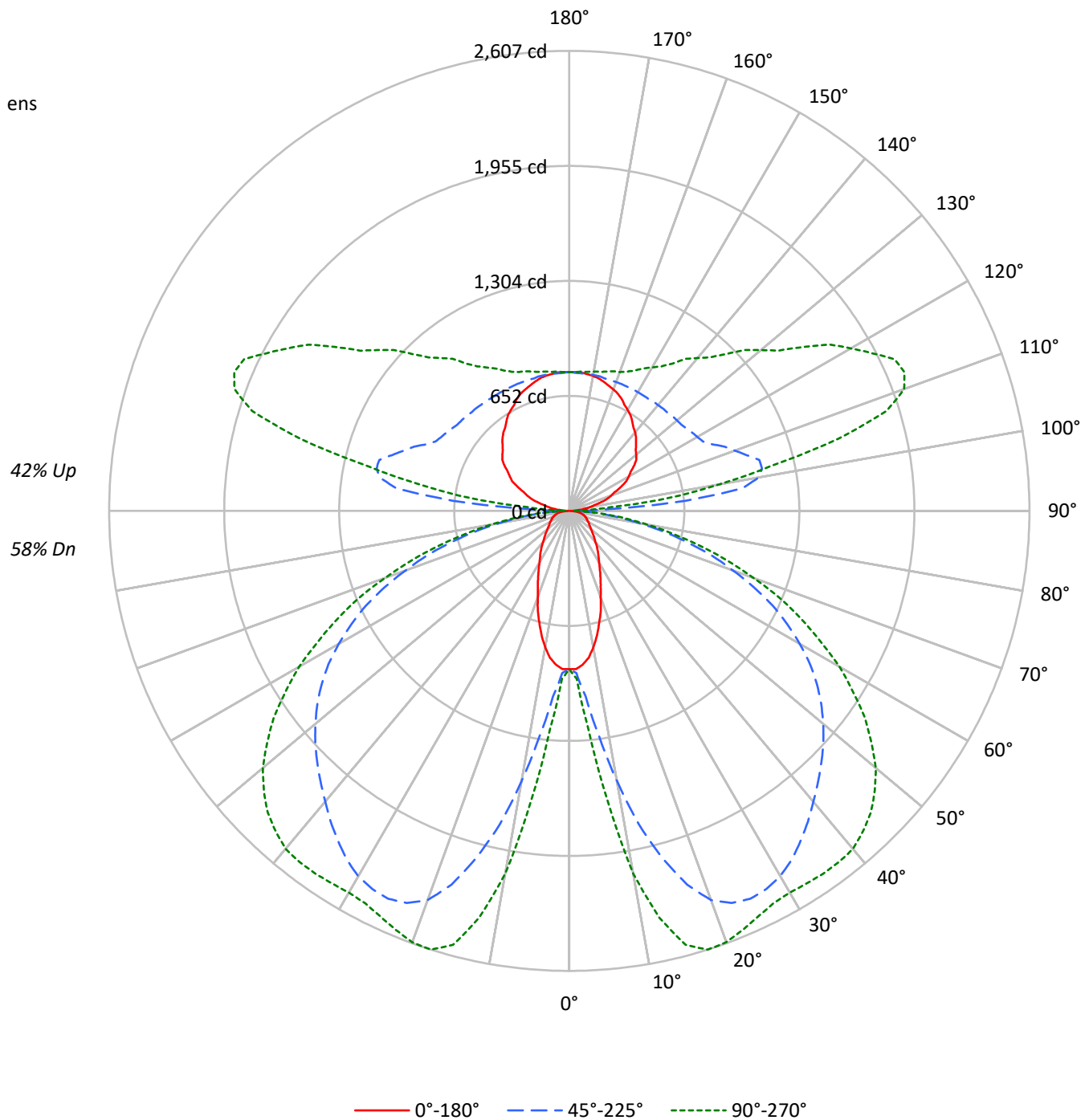
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12043.1 lumens  
Efficiency: N/A  
Efficacy: 97.1 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: General Diffuse

Input Watts (W): 124  
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: P937372  
CATALOG NUMBER: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P937372

CATALOG NUMBER: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

**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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

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

	0°	45°	90°
0°	4161	4161	4161
5°	4065	4810	5593
10°	3687	7010	9272
15°	3134	9159	11196
20°	2551	10613	11411
25°	2128	11107	11179
30°	1795	11176	11158
35°	1587	10991	11446
40°	1383	10750	11744
45°	1252	10573	11790
50°	1149	10414	11595
55°	1100	10182	11081
60°	1126	9734	10269
65°	1172	9055	9154
70°	1249	7896	7733
75°	1384	6439	6036
80°	1512	4465	4067
85°	1341	2369	2081

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11790 cd/sqm



TEST NUMBER: P937372

CATALOG NUMBER: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.0	1.0
10°-20°	514.2	4.3
20°-30°	899.3	7.5
30°-40°	1157.7	9.6
40°-50°	1293.1	10.7
50°-60°	1238.5	10.3
60°-70°	981.5	8.2
70°-80°	577.2	4.8
80°-90°	163.4	1.4
90°-100°	383.7	3.2
100°-110°	1008.6	8.4
110°-120°	1045.8	8.7
120°-130°	838.9	7.0
130°-140°	658.2	5.5
140°-150°	505.2	4.2
150°-160°	363.8	3.0
160°-170°	222.6	1.8
170°-180°	75.2	0.6
0°-30°	1529.5	12.7
0°-40°	2687.2	22.3
0°-60°	5218.8	43.3
0°-90°	6940.9	57.6
90°-120°	2438.2	20.2
90°-150°	4440.5	36.9
90°-180°	5102.0	42.4
0°-180°	12043.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	874	937	1056	1194	1237	81
15°	655	1208	2036	2468	2546	182
25°	418	1370	2425	2532	2535	193
35°	283	1309	2284	2414	2509	176
45°	193	1044	2019	2313	2416	149
55°	138	663	1713	1990	2044	126
65°	110	352	1272	1430	1450	109
75°	81	216	698	767	770	85
85°	29	66	173	190	193	31
90°	5	15	40	20	20	6
95°	51	199	661	341	232	56
105°	182	275	1115	1693	1579	193
115°	323	392	893	1782	2034	319
125°	449	503	812	1373	1620	399
135°	535	589	787	1108	1257	414
145°	621	660	777	946	1020	389
155°	702	721	777	853	878	322
165°	757	767	777	808	818	214
175°	787	787	782	792	792	75
180°	787	787	787	787	787	



TEST NUMBER: P937372  
 CATALOG NUMBER: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8
2.5°	896.8	896.8	902.6	905.5	911.2	914.1	919.9	925.7	943.0	945.9	951.6
5°	873.7	885.3	922.8	937.2	977.6	1032.4	1055.5	1092.9	1170.7	1193.8	1208.2
7.5°	839.1	865.1	957.4	980.5	1081.4	1225.6	1286.1	1366.9	1490.8	1551.4	1600.5
10°	784.4	839.1	1003.5	1058.3	1222.7	1441.8	1554.3	1666.8	1854.2	1937.9	1969.6
12.5°	723.8	813.2	1052.6	1127.5	1364.0	1684.1	1819.6	1943.6	2157.0	2269.5	2286.8
15°	654.6	775.7	1098.7	1208.2	1513.9	1885.9	2035.9	2188.7	2387.7	2468.4	2488.6
17.5°	594.0	746.9	1141.9	1257.3	1629.3	2067.6	2220.4	2347.3	2508.8	2563.6	2578.0
20°	519.0	700.8	1170.7	1320.7	1750.4	2200.3	2347.3	2445.3	2555.0	2589.6	2595.3
22.5°	464.3	651.7	1188.1	1343.8	1831.1	2281.0	2405.0	2482.8	2557.8	2569.4	2572.3
25°	418.2	596.9	1185.2	1369.8	1900.4	2330.0	2425.2	2482.8	2526.1	2531.9	2531.9
27.5°	374.9	536.3	1173.6	1375.6	1952.3	2341.6	2416.5	2456.9	2477.1	2488.6	2488.6
30°	337.4	478.7	1144.8	1364.0	1975.4	2330.0	2390.5	2410.7	2430.9	2448.2	2456.9
32.5°	308.6	423.9	1101.6	1340.9	1978.2	2301.2	2344.4	2356.0	2384.8	2425.2	2439.6
35°	282.6	369.1	1052.6	1309.2	1960.9	2255.1	2283.9	2295.4	2353.1	2413.6	2433.8
37.5°	256.6	328.7	989.1	1254.4	1935.0	2200.3	2220.4	2240.6	2330.0	2402.1	2425.2
40°	230.7	294.1	914.1	1193.8	1894.6	2133.9	2151.2	2182.9	2301.2	2384.8	2407.8
42.5°	210.5	265.3	833.4	1130.4	1842.7	2058.9	2084.9	2131.0	2266.6	2356.0	2381.9
45°	193.2	236.4	746.9	1043.9	1776.3	1981.1	2018.6	2082.0	2226.2	2312.8	2335.8
47.5°	175.9	216.2	657.5	954.5	1704.3	1903.2	1952.3	2024.4	2171.4	2255.1	2275.3
50°	161.5	196.1	568.1	859.3	1626.4	1819.6	1877.3	1952.3	2102.2	2180.1	2206.0
52.5°	150.0	178.7	484.4	764.2	1537.0	1733.1	1799.4	1877.3	2018.6	2093.5	2110.8
55°	138.4	164.4	412.4	663.3	1444.7	1640.8	1712.9	1787.9	1926.3	1989.8	2001.3
57.5°	132.7	152.8	351.8	568.1	1346.7	1537.0	1617.8	1687.0	1816.7	1865.7	1877.3
60°	124.0	144.2	305.7	487.3	1240.0	1438.9	1508.1	1577.4	1687.0	1727.3	1736.0
62.5°	115.4	138.4	271.1	409.5	1130.4	1323.6	1392.8	1456.2	1548.5	1577.4	1588.9
65°	109.6	132.7	245.1	351.8	1018.0	1202.5	1271.7	1326.5	1401.5	1430.3	1436.0
67.5°	103.8	126.9	224.9	302.8	905.5	1081.4	1133.2	1185.2	1242.9	1271.7	1274.6
70°	95.2	121.2	207.6	268.2	790.1	943.0	986.2	1041.0	1087.2	1101.6	1110.2
72.5°	89.4	112.5	196.1	242.2	671.9	810.3	850.7	882.4	922.8	937.2	937.2
75°	80.8	101.0	184.5	216.2	550.8	663.3	697.9	729.6	761.3	767.1	758.5
77.5°	72.1	89.4	158.6	181.6	429.7	524.8	553.6	571.0	596.9	602.7	605.6
80°	60.6	77.9	124.0	141.3	311.4	386.4	406.6	421.1	444.1	444.1	449.9
82.5°	46.2	60.6	89.4	101.0	210.5	265.3	282.6	291.2	305.7	305.7	305.7
85°	28.8	37.5	57.7	66.3	126.9	161.5	173.0	175.9	187.4	190.3	190.3
87.5°	14.4	20.2	37.5	40.4	66.3	83.7	83.7	89.4	89.4	86.5	83.7
90°	5.3	9.5	13.8	14.8	23.3	34.5	40.1	35.7	26.8	20.1	20.1
92.5°	21.1	57.1	93.0	102.0	143.4	198.5	226.1	198.2	142.3	100.4	96.4
95°	50.7	116.5	182.2	198.6	352.6	558.1	660.8	589.7	447.4	340.7	328.6
97.5°	87.7	145.7	203.7	218.2	475.1	817.6	988.8	943.8	854.0	786.6	763.6
100°	116.2	168.8	221.4	234.6	519.6	899.7	1089.7	1093.0	1099.6	1104.5	1077.1
102.5°	140.5	189.6	238.6	250.9	540.0	925.5	1118.2	1175.5	1290.1	1376.1	1352.6
105°	181.7	223.3	264.8	275.2	555.2	928.4	1115.1	1243.5	1500.3	1692.9	1680.3
107.5°	224.0	262.8	301.4	311.2	558.0	887.1	1051.7	1230.8	1589.1	1857.8	1860.9
110°	252.5	287.5	322.4	331.2	553.7	850.5	998.9	1199.1	1599.6	1900.0	1913.2



TEST NUMBER: P937372

CATALOG NUMBER: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	280.5	313.8	347.1	355.5	553.9	818.5	950.8	1155.8	1565.7	1873.1	1893.3
115°	322.7	353.5	384.3	391.9	559.0	781.8	893.2	1090.6	1485.5	1781.7	1809.7
117.5°	364.5	392.4	420.4	427.4	569.5	758.9	853.6	1031.8	1388.2	1655.4	1686.4
120°	388.8	415.0	441.3	447.9	577.8	751.1	837.8	1000.6	1326.2	1570.4	1600.6
122.5°	412.5	439.1	465.6	472.3	590.0	747.0	825.6	972.2	1265.5	1485.4	1515.1
125°	449.0	473.2	497.3	503.4	606.4	743.7	812.4	936.9	1186.0	1372.8	1400.3
127.5°	478.6	503.0	527.4	533.5	622.8	741.8	801.3	908.2	1122.1	1282.5	1305.6
130°	494.4	520.7	547.0	553.5	634.7	743.0	797.1	892.3	1082.7	1225.5	1246.9
132.5°	510.8	537.1	563.4	570.0	644.5	743.7	793.4	878.6	1049.1	1176.9	1196.0
135°	535.1	559.0	583.0	589.0	655.0	743.0	787.1	858.5	1001.2	1108.2	1124.7
137.5°	559.9	583.6	607.3	613.3	670.9	747.6	786.0	846.3	967.0	1057.5	1071.0
140°	580.6	602.4	624.2	629.6	680.5	748.4	782.3	834.4	938.6	1016.9	1029.5
142.5°	596.4	616.6	636.8	641.8	688.7	751.1	782.3	828.1	919.6	988.3	999.1
145°	620.7	638.3	655.9	660.3	699.2	751.1	777.0	814.5	889.4	945.5	953.7
147.5°	645.0	662.1	679.3	683.6	714.7	756.2	777.0	806.5	865.4	909.6	916.4
150°	660.8	676.3	691.8	695.7	722.8	759.0	777.0	801.9	851.7	889.0	894.5
152.5°	677.2	688.9	700.7	703.6	728.0	760.7	777.0	798.2	840.8	872.6	876.8
155°	701.5	710.1	718.8	721.0	739.7	764.6	777.0	793.9	827.7	853.1	855.8
157.5°	719.4	727.9	736.3	738.4	751.3	768.4	777.0	790.1	816.5	836.2	838.1
160°	731.6	738.2	744.7	746.4	756.6	770.2	777.0	788.3	810.8	827.7	828.8
162.5°	743.7	748.7	753.6	754.9	762.3	772.1	777.0	786.6	805.6	819.8	820.8
165°	756.9	761.3	765.9	767.0	770.3	774.8	777.0	783.8	797.5	807.7	808.8
167.5°	769.1	771.2	773.4	773.9	776.7	780.4	782.3	786.7	795.7	802.4	802.8
170°	777.0	779.2	781.3	781.8	782.0	782.2	782.3	786.7	795.7	802.4	802.4
172.5°	781.3	781.7	782.2	782.3	782.3	782.3	782.3	785.8	792.9	798.2	797.7
175°	787.1	787.1	787.1	787.1	785.5	783.3	782.3	784.5	789.0	792.4	792.4
177.5°	787.1	787.1	787.1	787.1	785.8	784.2	783.3	785.1	788.6	791.3	790.8
180°	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1



TEST NUMBER: P937372

CATALOG NUMBER: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	896.8	896.8
2.5°	957.4	951.6
5°	1231.3	1237.1
7.5°	1658.1	1655.3
10°	2061.8	2087.8
12.5°	2356.0	2361.7
15°	2534.8	2546.3
17.5°	2604.0	2606.9
20°	2606.9	2601.1
22.5°	2575.2	2569.4
25°	2537.7	2534.8
27.5°	2503.0	2505.9
30°	2488.6	2497.3
32.5°	2488.6	2503.0
35°	2494.4	2508.8
37.5°	2491.5	2508.8
40°	2480.0	2500.2
42.5°	2448.2	2462.7
45°	2399.2	2416.5
47.5°	2335.8	2347.3
50°	2255.1	2266.6
52.5°	2154.1	2157.0
55°	2033.0	2044.5
57.5°	1903.2	1906.1
60°	1759.0	1767.7
62.5°	1606.2	1606.2
65°	1444.7	1450.5
67.5°	1277.5	1291.9
70°	1107.3	1110.2
72.5°	940.1	940.1
75°	767.1	770.0
77.5°	602.7	602.7
80°	447.0	449.9
82.5°	308.6	314.3
85°	193.2	193.2
87.5°	89.4	80.8
90°	20.1	20.1
92.5°	80.4	64.4
95°	280.3	231.9
97.5°	671.5	579.4
100°	967.5	857.9
102.5°	1258.7	1164.8
105°	1629.8	1579.4
107.5°	1873.0	1885.2
110°	1965.8	2018.4





TEST NUMBER: P937372

CATALOG NUMBER: SQ4-FB-075U-125D-935-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1974.0	2054.8
115°	1921.7	2033.6
117.5°	1810.7	1934.9
120°	1721.3	1841.9
122.5°	1634.1	1753.2
125°	1509.9	1619.6
127.5°	1398.1	1490.7
130°	1332.3	1417.7
132.5°	1272.5	1349.1
135°	1190.7	1256.6
137.5°	1125.0	1179.0
140°	1080.0	1130.4
142.5°	1042.6	1086.0
145°	986.6	1019.5
147.5°	943.6	970.9
150°	916.6	938.6
152.5°	893.4	910.1
155°	866.9	877.9
157.5°	845.9	853.6
160°	833.3	837.8
162.5°	825.1	829.3
165°	813.2	817.7
167.5°	804.7	806.6
170°	802.4	802.4
172.5°	796.1	794.5
175°	792.4	792.4
177.5°	789.0	787.1
180°	787.1	787.1



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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	6.63	7.61	7.51	8.51	9.67	19.80	20.78	20.68	21.69	22.85
	3H	7.34	8.22	8.23	9.14	10.32	21.65	22.53	22.54	23.45	24.63
	4H	7.64	8.48	8.55	9.40	10.59	22.30	23.14	23.21	24.06	25.25
	6H	7.90	8.67	8.82	9.60	10.80	22.74	23.51	23.66	24.44	25.64
	8H	7.97	8.71	8.90	9.66	10.86	22.86	23.60	23.79	24.55	25.75
	12H	7.99	8.70	8.93	9.64	10.86	22.94	23.64	23.87	24.58	25.81
4H	2H	13.86	14.69	14.77	15.61	16.80	20.09	20.93	21.01	21.85	23.04
	3H	15.43	16.13	16.36	17.09	18.29	22.15	22.85	23.07	23.80	25.01
	4H	15.53	16.17	16.47	17.12	18.35	22.92	23.56	23.86	24.51	25.74
	6H	15.55	16.11	16.50	17.08	18.31	23.47	24.02	24.42	24.99	26.22
	8H	15.53	16.05	16.48	17.02	18.26	23.63	24.15	24.58	25.12	26.36
	12H	15.49	15.96	16.47	16.95	18.19	23.73	24.20	24.70	25.18	26.43
8H	4H	16.99	17.51	17.94	18.47	19.72	22.99	23.51	23.94	24.48	25.72
	6H	17.24	17.67	18.21	18.67	19.92	23.63	24.06	24.60	25.06	26.31
	8H	17.26	17.64	18.24	18.63	19.89	23.85	24.23	24.84	25.22	26.48
	12H	17.23	17.57	18.22	18.56	19.86	24.00	24.33	24.99	25.32	26.63
12H	4H	17.14	17.61	18.11	18.59	19.84	22.95	23.42	23.92	24.40	25.65
	6H	17.50	17.88	18.48	18.87	20.13	23.61	23.99	24.60	24.99	26.25
	8H	17.57	17.91	18.56	18.90	20.20	23.85	24.18	24.84	25.17	26.48