

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: P937771

Luminaire Tested: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

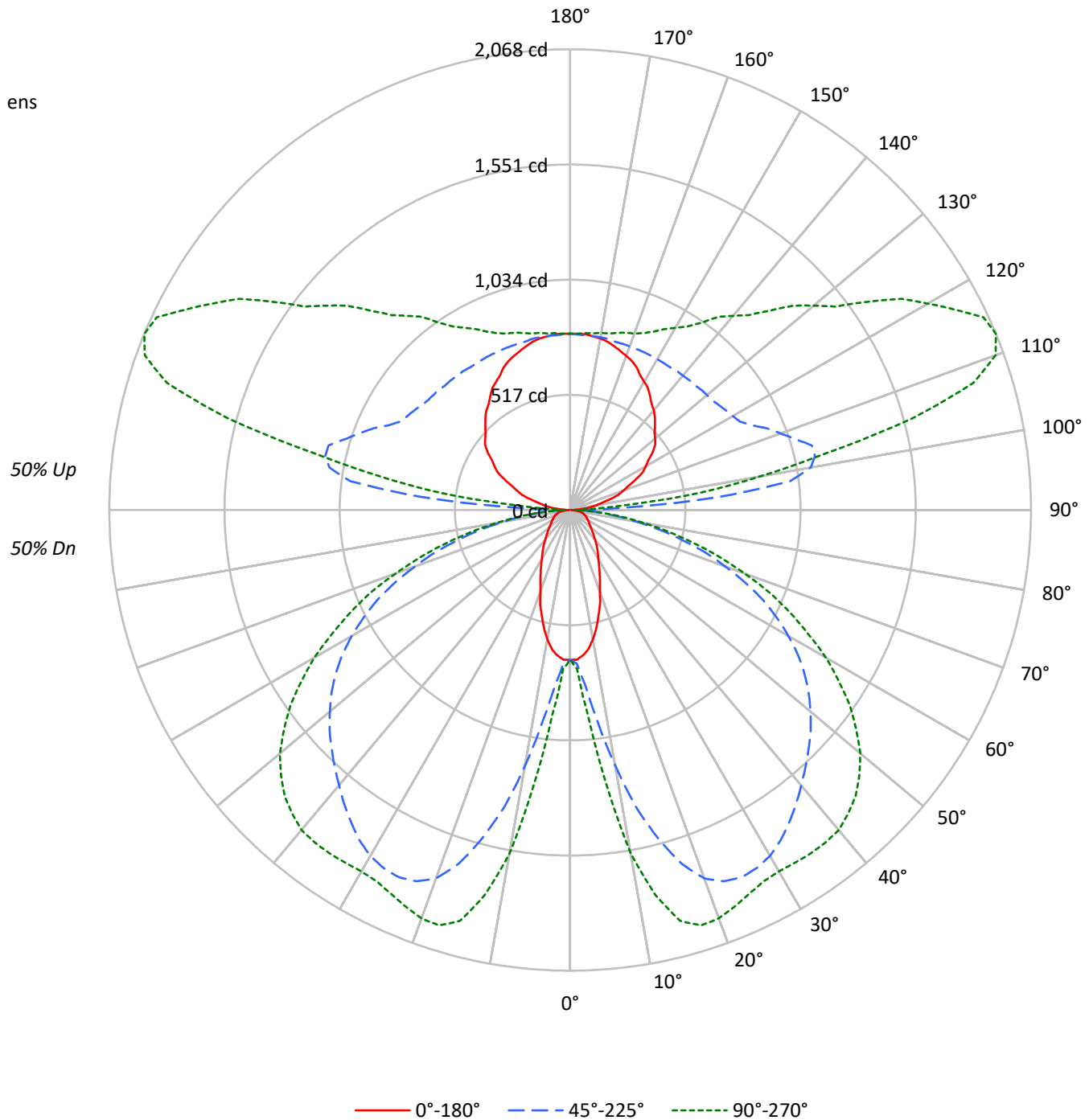
Test Method: LM-79-2019  
Report Number: P937771  
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10340.7 lumens  
Efficiency: N/A  
Efficacy: 100.2 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: General Diffuse  
  
Input Watts (W): 103.2  
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: P937771  
CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P937771

CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

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

	0°	45°	90°
0°	4161	4161	4161
5°	4063	4808	5593
10°	3684	7007	9272
15°	3130	9152	11196
20°	2547	10603	11410
25°	2124	11092	11178
30°	1790	11160	11157
35°	1583	10972	11446
40°	1378	10727	11744
45°	1247	10547	11790
50°	1143	10386	11594
55°	1093	10150	11080
60°	1118	9700	10269
65°	1162	9017	9154
70°	1235	7858	7734
75°	1364	6402	6035
80°	1478	4434	4067
85°	1288	2349	2081

**MAXIMUM LUMINANCE 45°-90°:**

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



TEST NUMBER: P937771

CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.0	0.8
10°-20°	385.6	3.7
20°-30°	674.5	6.5
30°-40°	868.2	8.4
40°-50°	969.8	9.4
50°-60°	928.8	9.0
60°-70°	736.1	7.1
70°-80°	432.8	4.2
80°-90°	123.3	1.2
90°-100°	386.1	3.7
100°-110°	1015.0	9.8
110°-120°	1052.5	10.2
120°-130°	844.2	8.2
130°-140°	662.4	6.4
140°-150°	508.4	4.9
150°-160°	366.2	3.5
160°-170°	224.0	2.2
170°-180°	75.7	0.7
0°-30°	1147.1	11.1
0°-40°	2015.3	19.5
0°-60°	3914.0	37.8
0°-90°	5206.2	50.3
90°-120°	2453.6	23.7
90°-150°	4468.7	43.2
90°-180°	5135.0	49.7
0°-180°	10340.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	655	703	792	895	928	60
15°	491	906	1527	1851	1910	137
25°	314	1027	1819	1899	1901	144
35°	212	982	1713	1810	1882	132
45°	145	783	1514	1734	1812	112
55°	104	497	1285	1492	1533	95
65°	82	264	954	1073	1088	81
75°	61	162	523	575	577	63
85°	22	50	130	143	145	23
90°	5	15	40	20	20	6
95°	51	200	665	343	233	57
105°	183	277	1122	1704	1589	194
115°	325	394	899	1793	2047	321
125°	452	507	818	1382	1630	401
135°	538	593	792	1115	1265	417
145°	625	664	782	952	1026	391
155°	706	726	782	858	883	324
165°	762	772	782	813	823	215
175°	792	792	787	797	797	75
180°	792	792	792	792	792	



TEST NUMBER: P937771

CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6
2.5°	672.6	672.6	676.9	679.0	683.4	685.6	689.9	694.2	707.2	709.4	713.7
5°	655.3	664.0	692.1	702.9	733.1	774.2	791.5	819.6	878.1	895.4	906.2
7.5°	629.4	648.8	718.0	735.3	811.0	919.1	964.5	1025.1	1118.1	1163.5	1200.3
10°	588.2	629.4	752.6	793.7	917.0	1081.4	1165.7	1250.1	1390.6	1453.3	1477.1
12.5°	542.8	609.9	789.4	845.6	1022.9	1263.0	1364.6	1457.6	1617.7	1702.0	1715.0
15°	490.9	581.7	824.0	906.2	1135.4	1414.4	1526.9	1641.5	1790.7	1851.2	1866.4
17.5°	445.5	560.1	856.4	942.9	1221.9	1550.6	1665.2	1760.4	1881.6	1922.6	1933.4
20°	389.3	525.5	878.1	990.5	1312.8	1650.2	1760.4	1833.9	1916.1	1942.0	1946.4
22.5°	348.2	488.8	891.0	1007.8	1373.3	1710.6	1803.7	1862.0	1918.3	1927.0	1929.1
25°	313.6	447.6	888.9	1027.3	1425.2	1747.5	1818.8	1862.0	1894.5	1898.9	1898.9
27.5°	281.2	402.2	880.2	1031.6	1464.2	1756.1	1812.3	1842.6	1857.7	1866.4	1866.4
30°	253.0	359.0	858.6	1022.9	1481.5	1747.5	1792.9	1808.0	1823.1	1836.1	1842.6
32.5°	231.4	317.9	826.1	1005.6	1483.6	1725.8	1758.3	1766.9	1788.5	1818.8	1829.6
35°	212.0	276.8	789.4	981.8	1470.6	1691.2	1712.9	1721.5	1764.7	1810.2	1825.3
37.5°	192.5	246.6	741.8	940.8	1451.1	1650.2	1665.2	1680.4	1747.5	1801.5	1818.8
40°	173.0	220.6	685.6	895.4	1420.9	1600.4	1613.3	1637.1	1725.8	1788.5	1805.8
42.5°	157.9	198.9	625.0	847.7	1381.9	1544.2	1563.6	1598.2	1699.8	1766.9	1786.4
45°	144.9	177.3	560.1	782.9	1332.2	1485.7	1513.8	1561.5	1669.6	1734.5	1751.8
47.5°	131.9	162.2	493.1	715.9	1278.2	1427.4	1464.2	1518.2	1628.5	1691.2	1706.4
50°	121.1	147.1	426.1	644.5	1219.7	1364.6	1407.9	1464.2	1576.6	1635.0	1654.4
52.5°	112.5	134.1	363.3	573.1	1152.7	1299.7	1349.5	1407.9	1513.8	1570.1	1583.1
55°	103.8	123.3	309.3	497.4	1083.5	1230.5	1284.6	1340.9	1444.7	1492.3	1500.9
57.5°	99.5	114.6	263.9	426.1	1010.0	1152.7	1213.2	1265.1	1362.5	1399.2	1407.9
60°	93.0	108.1	229.3	365.5	930.0	1079.1	1131.1	1183.0	1265.1	1295.5	1301.9
62.5°	86.5	103.8	203.3	307.1	847.7	992.7	1044.6	1092.2	1161.4	1183.0	1191.6
65°	82.2	99.5	183.9	263.9	763.4	901.8	953.7	994.8	1051.0	1072.7	1077.0
67.5°	77.9	95.2	168.7	227.1	679.0	811.0	850.0	888.9	932.1	953.7	955.9
70°	71.4	90.8	155.7	201.2	592.6	707.2	739.6	780.7	815.4	826.1	832.7
72.5°	67.1	84.3	147.1	181.6	503.9	607.7	638.0	661.7	692.1	702.9	702.9
75°	60.6	75.7	138.4	162.2	413.0	497.4	523.4	547.2	570.9	575.3	568.8
77.5°	54.1	67.1	118.9	136.2	322.2	393.6	415.3	428.2	447.6	452.0	454.2
80°	45.4	58.4	93.0	106.0	233.5	289.8	304.9	315.8	333.0	333.0	337.4
82.5°	34.6	45.4	67.1	75.7	157.9	198.9	212.0	218.5	229.3	229.3	229.3
85°	21.6	28.1	43.3	49.8	95.2	121.1	129.8	131.9	140.6	142.7	142.7
87.5°	10.8	15.2	28.1	30.2	49.8	62.7	62.7	67.1	67.1	64.9	62.7
90°	5.3	9.5	13.8	14.9	23.4	34.8	40.4	35.9	26.9	20.2	20.2
92.5°	21.3	57.4	93.5	102.6	144.2	199.7	227.5	199.4	143.1	101.0	97.0
95°	51.0	117.2	183.4	199.9	354.9	561.6	665.0	593.4	450.2	342.8	330.7
97.5°	88.3	146.6	205.0	219.6	478.1	822.8	995.1	949.9	859.4	791.5	768.3
100°	117.0	169.9	222.8	236.0	522.9	905.3	1096.6	1099.9	1106.6	1111.5	1083.9
102.5°	141.4	190.8	240.2	252.5	543.5	931.4	1125.3	1183.0	1298.3	1384.8	1361.2
105°	182.8	224.7	266.5	277.0	558.7	934.4	1122.2	1251.4	1509.8	1703.7	1691.0
107.5°	225.4	264.4	303.4	313.1	561.6	892.7	1058.4	1238.6	1599.1	1869.5	1872.6
110°	254.1	289.3	324.5	333.3	557.3	855.9	1005.2	1206.7	1609.8	1912.1	1925.3



TEST NUMBER: P937771

CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	282.3	315.8	349.4	357.8	557.5	823.7	956.8	1163.1	1575.6	1885.0	1905.2
115°	324.8	355.7	386.6	394.4	562.6	786.7	898.9	1097.5	1495.0	1793.0	1821.2
117.5°	366.8	394.9	423.0	430.0	573.0	763.6	859.0	1038.3	1396.9	1665.9	1697.2
120°	391.2	417.7	444.1	450.8	581.6	755.9	843.1	1006.9	1334.6	1580.4	1610.7
122.5°	415.2	441.8	468.6	475.2	593.8	751.8	830.9	978.4	1273.5	1494.7	1524.7
125°	451.8	476.2	500.6	506.6	610.3	748.5	817.6	942.9	1193.6	1381.6	1409.2
127.5°	481.6	506.2	530.8	536.9	626.7	746.5	806.4	914.0	1129.2	1290.7	1314.0
130°	497.6	524.1	550.5	557.1	638.8	747.7	802.2	897.9	1089.5	1233.3	1254.7
132.5°	514.0	540.5	566.9	573.6	648.5	748.5	798.4	884.2	1055.7	1184.4	1203.6
135°	538.5	562.6	586.7	592.7	659.2	747.7	792.0	863.8	1007.5	1115.3	1131.9
137.5°	563.4	587.3	611.2	617.2	675.1	752.4	791.0	851.7	973.2	1064.2	1077.8
140°	584.2	606.2	628.2	633.6	684.8	753.1	787.2	839.7	944.6	1023.3	1035.9
142.5°	600.1	620.5	640.8	645.9	693.0	755.8	787.2	833.3	925.4	994.5	1005.4
145°	624.6	642.3	660.0	664.5	703.7	755.9	782.0	819.6	895.0	951.5	959.8
147.5°	649.1	666.3	683.5	687.8	719.2	761.0	782.0	811.6	870.9	915.4	922.2
150°	665.0	680.6	696.2	700.1	727.4	763.7	782.0	807.0	857.0	894.6	900.1
152.5°	681.5	693.4	705.1	708.1	732.7	765.5	782.0	803.4	846.1	878.2	882.3
155°	706.0	714.7	723.3	725.6	744.4	769.4	782.0	799.0	833.0	858.5	861.3
157.5°	724.0	732.5	741.0	743.1	756.1	773.4	782.0	795.2	821.7	841.5	843.5
160°	736.2	742.9	749.5	751.1	761.4	775.1	782.0	793.3	816.0	833.0	834.1
162.5°	748.5	753.4	758.4	759.6	767.1	777.0	782.0	791.5	810.7	825.0	826.0
165°	761.8	766.2	770.7	771.8	775.2	779.8	782.0	788.8	802.5	812.8	813.9
167.5°	774.0	776.1	778.2	778.7	781.5	785.4	787.2	791.8	800.7	807.4	808.0
170°	782.0	784.1	786.2	786.7	786.9	787.2	787.2	791.8	800.7	807.4	807.4
172.5°	786.2	786.7	787.2	787.2	787.2	787.2	787.2	790.8	797.9	803.2	802.8
175°	792.0	792.0	792.0	792.0	790.4	788.3	787.2	789.5	794.0	797.4	797.4
177.5°	792.0	792.0	792.0	792.0	790.8	789.2	788.4	790.1	793.6	796.3	795.8
180°	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0



TEST NUMBER: P937771

CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	672.6	672.6
2.5°	718.0	713.7
5°	923.5	927.8
7.5°	1243.6	1241.4
10°	1546.3	1565.8
12.5°	1766.9	1771.2
15°	1901.0	1909.7
17.5°	1952.9	1955.1
20°	1955.1	1950.7
22.5°	1931.2	1927.0
25°	1903.1	1901.0
27.5°	1877.2	1879.3
30°	1866.4	1872.9
32.5°	1866.4	1877.2
35°	1870.7	1881.6
37.5°	1868.5	1881.6
40°	1859.9	1875.0
42.5°	1836.1	1847.0
45°	1799.3	1812.3
47.5°	1751.8	1760.4
50°	1691.2	1699.8
52.5°	1615.5	1617.7
55°	1524.7	1533.3
57.5°	1427.4	1429.5
60°	1319.2	1325.7
62.5°	1204.6	1204.6
65°	1083.5	1087.8
67.5°	958.1	968.9
70°	830.4	832.7
72.5°	705.0	705.0
75°	575.3	577.4
77.5°	452.0	452.0
80°	335.2	337.4
82.5°	231.4	235.7
85°	144.9	144.9
87.5°	67.1	60.6
90°	20.2	20.2
92.5°	80.9	64.8
95°	282.0	233.4
97.5°	675.7	583.1
100°	973.6	863.2
102.5°	1266.6	1172.1
105°	1640.2	1589.4
107.5°	1885.0	1897.2
110°	1978.3	2031.2





TEST NUMBER: P937771

CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1986.5	2067.8
115°	1933.9	2046.6
117.5°	1822.2	1947.2
120°	1732.2	1853.6
122.5°	1644.5	1764.3
125°	1519.5	1629.8
127.5°	1407.1	1500.1
130°	1340.8	1426.8
132.5°	1280.6	1357.7
135°	1198.3	1264.6
137.5°	1132.1	1186.5
140°	1086.8	1137.6
142.5°	1049.2	1092.9
145°	992.9	1026.0
147.5°	949.6	977.1
150°	922.4	944.6
152.5°	899.1	915.9
155°	872.4	883.4
157.5°	851.2	859.0
160°	838.6	843.1
162.5°	830.3	834.5
165°	818.4	822.9
167.5°	809.8	811.7
170°	807.4	807.4
172.5°	801.1	799.5
175°	797.4	797.4
177.5°	793.9	792.0
180°	792.0	792.0



TEST NUMBER: P937771

CATALOG NUMBER: SQ4-FB-100U-125D-935-1D-UNV-STD-W-6

**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	5.99	6.89	6.93	7.86	9.12	19.15	20.05	20.10	21.02	22.29
	3H	6.70	7.51	7.65	8.48	9.77	20.99	21.80	21.95	22.78	24.06
	4H	7.00	7.77	7.97	8.75	10.04	21.63	22.40	22.60	23.38	24.68
	6H	7.25	7.96	8.23	8.95	10.25	22.06	22.77	23.04	23.76	25.06
	8H	7.32	8.00	8.31	9.00	10.30	22.18	22.86	23.17	23.86	25.17
	12H	7.34	7.98	8.33	8.98	10.31	22.25	22.89	23.24	23.89	25.22
4H	2H	13.20	13.97	14.17	14.95	16.24	19.43	20.20	20.41	21.18	22.48
	3H	14.77	15.41	15.76	16.43	17.73	21.48	22.12	22.46	23.13	24.44
	4H	14.87	15.46	15.86	16.46	17.79	22.24	22.83	23.24	23.83	25.17
	6H	14.88	15.39	15.89	16.42	17.75	22.78	23.29	23.79	24.31	25.64
	8H	14.86	15.33	15.87	16.36	17.70	22.94	23.42	23.95	24.44	25.78
	12H	14.82	15.25	15.85	16.28	17.63	23.03	23.46	24.06	24.50	25.85
8H	4H	16.31	16.79	17.32	17.81	19.15	22.31	22.78	23.31	23.80	25.15
	6H	16.56	16.95	17.59	18.01	19.35	22.93	23.33	23.97	24.39	25.73
	8H	16.58	16.92	17.62	17.97	19.33	23.15	23.50	24.19	24.55	25.91
	12H	16.55	16.85	17.59	17.89	19.30	23.29	23.60	24.34	24.64	26.05
12H	4H	16.46	16.89	17.49	17.92	19.27	22.26	22.69	23.29	23.73	25.08
	6H	16.81	17.16	17.86	18.21	19.57	22.92	23.26	23.96	24.31	25.67
	8H	16.89	17.19	17.93	18.23	19.64	23.15	23.45	24.19	24.49	25.90