

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: P936972

Luminaire Tested: SQ4-FB-050U-125D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936972
REPORT IS A COMBINATION OF REPORTS P933488 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

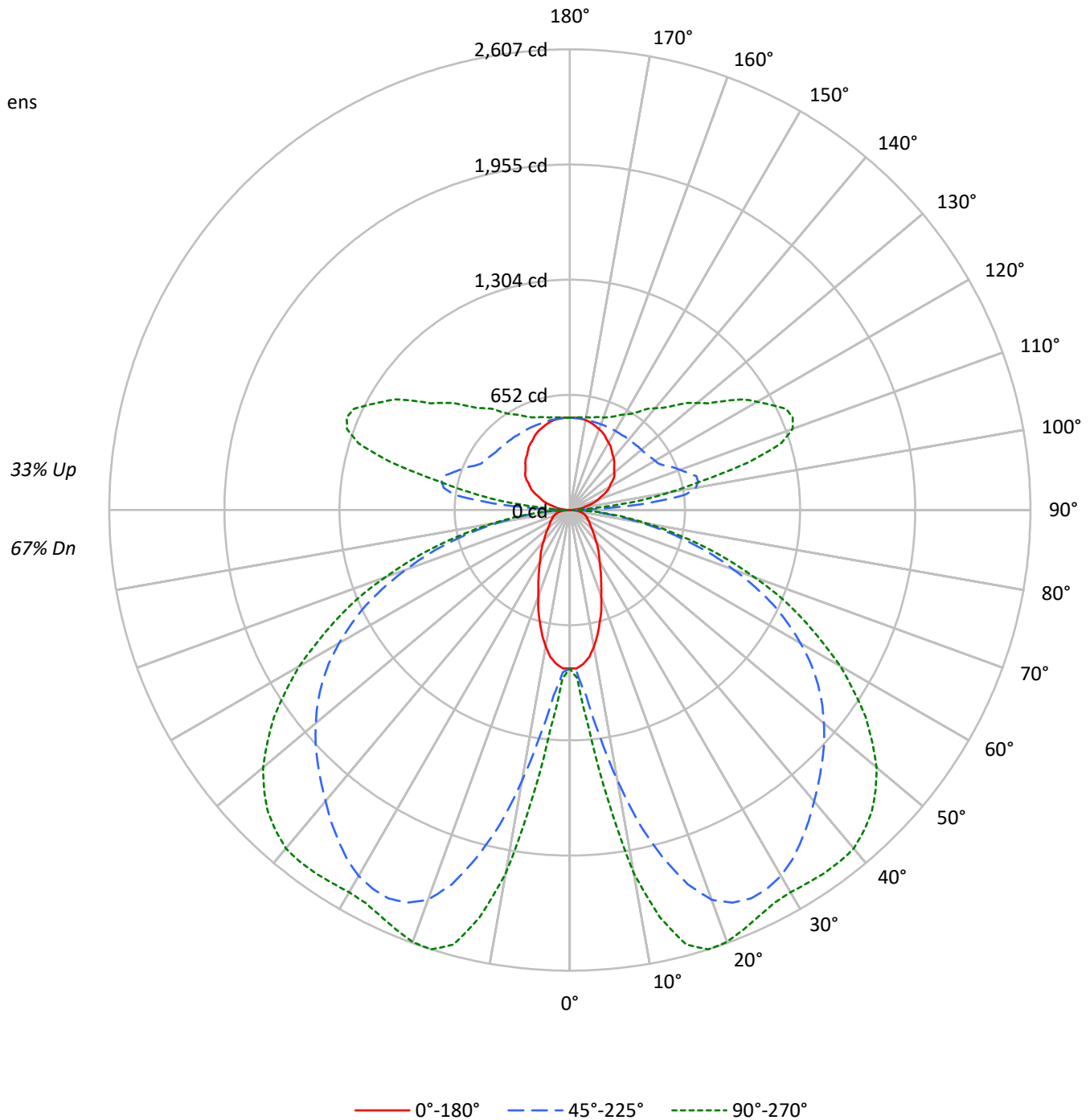
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10332.3 lumens
Efficiency: N/A
Efficacy: 92.3 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): 112
Input Voltage (V): NR
Input Current (A_{in}): 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: P936972
CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





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CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-8

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

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: P936972

CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	1.1
10°-20°	514.2	5.0
20°-30°	899.3	8.7
30°-40°	1157.7	11.2
40°-50°	1293.1	12.5
50°-60°	1238.5	12.0
60°-70°	981.5	9.5
70°-80°	577.2	5.6
80°-90°	162.3	1.6
90°-100°	255.1	2.5
100°-110°	670.6	6.5
110°-120°	695.4	6.7
120°-130°	557.8	5.4
130°-140°	437.7	4.2
140°-150°	335.9	3.3
150°-160°	241.9	2.3
160°-170°	148.0	1.4
170°-180°	50.0	0.5
0°-30°	1529.5	14.8
0°-40°	2687.2	26.0
0°-60°	5218.8	50.5
0°-90°	6939.9	67.2
90°-120°	1621.1	15.7
90°-150°	2952.4	28.6
90°-180°	3392.0	32.8
0°-180°	10332.3	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°	4	10	27	13	13	5
95°	34	132	439	226	154	37
105°	121	183	741	1126	1050	128
115°	215	261	594	1185	1352	212
125°	298	335	540	913	1077	265
135°	356	392	523	737	836	275
145°	413	439	517	629	678	259
155°	466	479	517	567	584	214
165°	503	510	517	537	544	142
175°	523	523	520	527	527	50
180°	523	523	523	523	523	



TEST NUMBER: P936972
 CATALOG NUMBER: SQ4-FB-050U-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°	3.5	6.3	9.1	9.8	15.4	22.9	26.7	23.7	17.8	13.4	13.4
92.5°	14.1	37.9	61.9	67.8	95.3	132.0	150.3	131.7	94.6	66.7	64.1
95°	33.7	77.4	121.2	132.1	234.5	371.0	439.4	392.1	297.5	226.5	218.5
97.5°	58.3	96.8	135.4	145.0	315.8	543.6	657.5	627.6	567.8	523.0	507.6
100°	77.3	112.2	147.1	155.9	345.5	598.2	724.5	726.8	731.1	734.3	716.1
102.5°	93.5	126.1	158.6	166.8	359.0	615.4	743.5	781.6	857.8	914.9	899.3
105°	120.8	148.4	176.1	183.0	369.2	617.4	741.4	826.8	997.6	1125.7	1117.2
107.5°	148.9	174.7	200.4	206.9	371.0	589.8	699.2	818.3	1056.6	1235.2	1237.3
110°	167.8	191.1	214.4	220.2	368.2	565.5	664.1	797.3	1063.6	1263.3	1272.0



TEST NUMBER: P936972

CATALOG NUMBER: SQ4-FB-050U-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°	186.5	208.7	230.8	236.3	368.3	544.3	632.2	768.4	1041.0	1245.4	1258.8
115°	214.6	235.1	255.5	260.6	371.7	519.9	593.9	725.2	987.7	1184.6	1203.2
117.5°	242.3	260.9	279.5	284.1	378.6	504.6	567.5	686.0	923.0	1100.7	1121.3
120°	258.5	276.0	293.5	297.9	384.3	499.4	557.0	665.2	881.7	1044.1	1064.1
122.5°	274.3	291.9	309.5	314.0	392.3	496.7	548.9	646.4	841.4	987.6	1007.4
125°	298.5	314.6	330.7	334.7	403.2	494.5	540.2	623.0	788.6	912.8	931.1
127.5°	318.2	334.4	350.6	354.7	414.1	493.2	532.8	603.9	746.1	852.8	868.1
130°	328.7	346.2	363.7	368.1	422.0	494.0	529.9	593.2	719.9	814.8	829.0
132.5°	339.6	357.1	374.6	379.0	428.5	494.5	527.6	584.2	697.5	782.5	795.2
135°	355.8	371.7	387.6	391.6	435.5	494.0	523.3	570.8	665.7	736.8	747.8
137.5°	372.3	388.1	403.8	407.8	446.0	497.1	522.6	562.7	643.0	703.2	712.1
140°	386.0	400.5	415.0	418.7	452.5	497.6	520.1	554.8	624.1	676.1	684.4
142.5°	396.5	409.9	423.4	426.7	457.9	499.4	520.1	550.6	611.5	657.1	664.4
145°	412.7	424.4	436.1	439.0	464.9	499.4	516.7	541.5	591.4	628.7	634.1
147.5°	428.8	440.2	451.6	454.5	475.2	502.9	516.7	536.2	575.4	604.7	609.3
150°	439.4	449.7	460.0	462.6	480.6	504.6	516.7	533.2	566.3	591.1	594.8
152.5°	450.3	458.1	465.9	467.8	484.1	505.8	516.7	530.8	559.0	580.2	583.0
155°	466.4	472.2	478.0	479.4	491.9	508.4	516.7	527.9	550.3	567.2	569.1
157.5°	478.3	483.9	489.6	491.0	499.5	510.9	516.7	525.3	542.8	555.9	557.2
160°	486.4	490.8	495.2	496.3	503.1	512.1	516.7	524.2	539.1	550.3	551.1
162.5°	494.5	497.8	501.1	501.9	506.9	513.4	516.7	523.0	535.7	545.1	545.8
165°	503.3	506.3	509.2	509.9	512.1	515.1	516.7	521.2	530.2	537.0	537.8
167.5°	511.4	512.7	514.2	514.5	516.4	518.9	520.1	523.1	529.1	533.5	533.9
170°	516.7	518.0	519.5	519.8	519.9	520.1	520.1	523.1	529.1	533.5	533.5
172.5°	519.5	519.8	520.1	520.1	520.1	520.1	520.1	522.5	527.2	530.7	530.5
175°	523.3	523.3	523.3	523.3	522.3	520.8	520.1	521.6	524.6	526.8	526.8
177.5°	523.3	523.3	523.3	523.3	522.4	521.3	520.8	522.0	524.3	526.1	525.8
180°	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3



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CATALOG NUMBER: SQ4-FB-050U-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°	13.4	13.4
92.5°	53.4	42.9
95°	186.3	154.2
97.5°	446.4	385.3
100°	643.3	570.3
102.5°	836.8	774.4
105°	1083.7	1050.1
107.5°	1245.4	1253.5
110°	1307.0	1342.0



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CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1312.5	1366.2
115°	1277.7	1352.1
117.5°	1204.0	1286.5
120°	1144.4	1224.7
122.5°	1086.6	1165.7
125°	1003.9	1076.8
127.5°	929.6	991.1
130°	885.8	942.7
132.5°	846.1	897.0
135°	791.7	835.6
137.5°	748.1	783.9
140°	718.0	751.5
142.5°	693.2	722.1
145°	656.0	677.9
147.5°	627.4	645.6
150°	609.4	624.1
152.5°	594.1	605.2
155°	576.4	583.7
157.5°	562.4	567.5
160°	554.1	557.0
162.5°	548.6	551.4
165°	540.7	543.7
167.5°	535.1	536.3
170°	533.5	533.5
172.5°	529.3	528.2
175°	526.8	526.8
177.5°	524.6	523.3
180°	523.3	523.3



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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	7.39	8.48	8.17	9.30	10.30	20.56	21.66	21.35	22.48	23.48
	3H	8.11	9.10	8.91	9.92	10.95	22.42	23.41	23.22	24.23	25.26
	4H	8.42	9.35	9.23	10.19	11.22	23.08	24.01	23.89	24.84	25.88
	6H	8.68	9.55	9.51	10.39	11.44	23.52	24.38	24.35	25.22	26.28
	8H	8.76	9.58	9.59	10.44	11.49	23.65	24.47	24.49	25.33	26.39
	12H	8.78	9.57	9.63	10.42	11.50	23.72	24.51	24.57	25.36	26.45
4H	2H	14.63	15.56	15.45	16.40	17.44	20.87	21.80	21.69	22.63	23.67
	3H	16.22	17.00	17.05	17.87	18.92	22.93	23.72	23.77	24.58	25.64
	4H	16.32	17.04	17.17	17.90	18.98	23.71	24.43	24.56	25.29	26.37
	6H	16.35	16.97	17.21	17.86	18.94	24.26	24.89	25.13	25.77	26.86
	8H	16.33	16.91	17.20	17.80	18.89	24.43	25.01	25.30	25.90	27.00
	12H	16.30	16.82	17.19	17.73	18.83	24.54	25.06	25.42	25.97	27.07
8H	4H	17.79	18.37	18.65	19.25	20.35	23.79	24.37	24.66	25.26	26.36
	6H	18.04	18.52	18.94	19.45	20.55	24.43	24.92	25.33	25.84	26.94
	8H	18.06	18.49	18.97	19.41	20.53	24.66	25.08	25.56	26.00	27.12
	12H	18.04	18.42	18.95	19.33	20.50	24.81	25.19	25.72	26.10	27.27
12H	4H	17.94	18.47	18.83	19.37	20.48	23.76	24.28	24.64	25.18	26.29
	6H	18.30	18.73	19.21	19.65	20.77	24.42	24.85	25.32	25.77	26.88
	8H	18.38	18.76	19.29	19.67	20.84	24.66	25.04	25.57	25.95	27.12