

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: P937876

Luminaire Tested: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937876
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

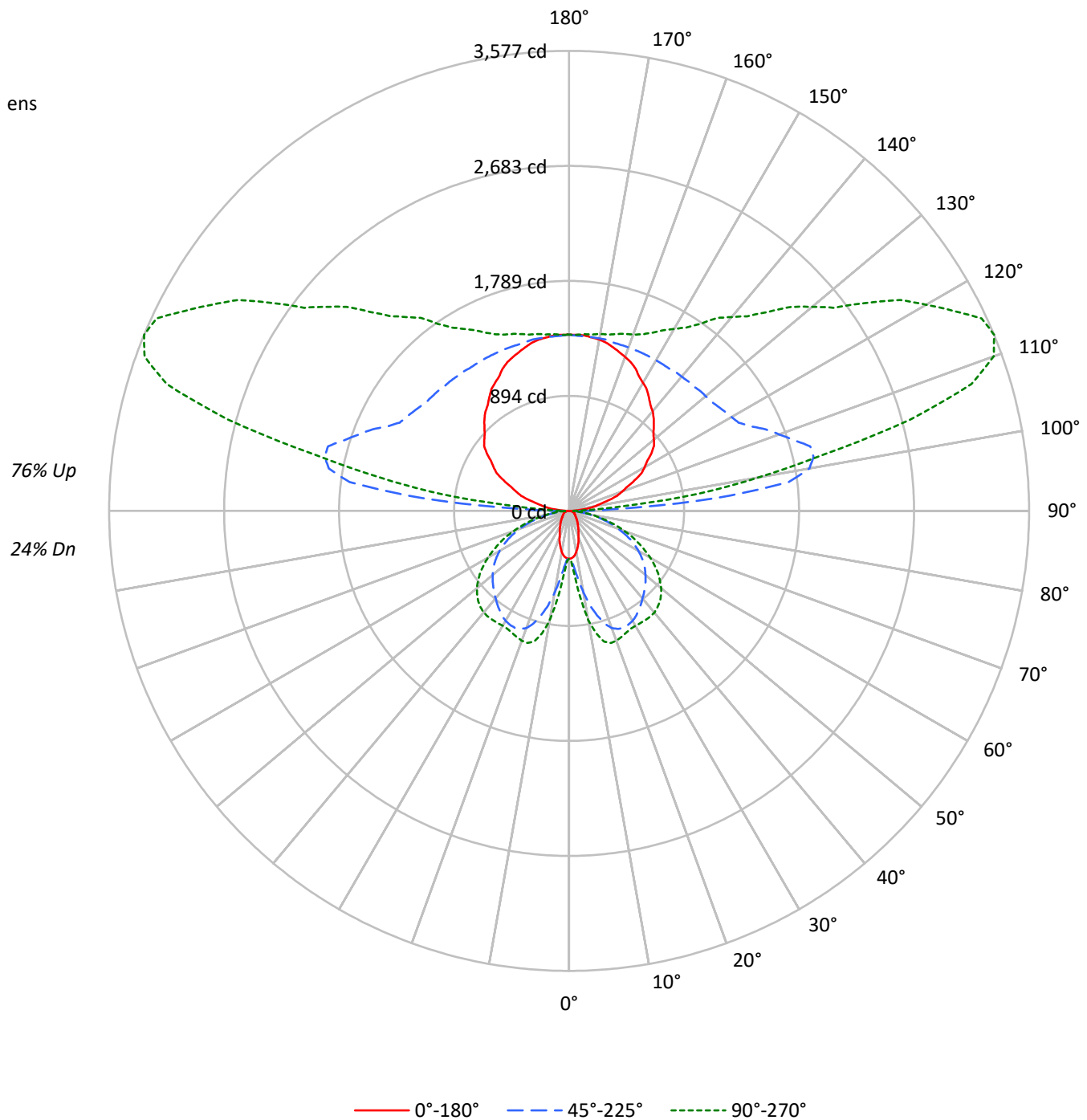
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11752.7 lumens
Efficiency: N/A
Efficacy: 123.5 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-Indirect

Input Watts (W): 95.2
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: P937876
CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P937876

CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24				24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20				20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16				16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13				13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11				11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10				10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8				8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7				7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6				6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6				6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5				5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1719	1719	1719
5°	1679	1986	2310
10°	1523	2896	3830
15°	1294	3783	4624
20°	1054	4384	4713
25°	879	4587	4617
30°	741	4616	4609
35°	655	4540	4728
40°	571	4440	4851
45°	517	4367	4870
50°	474	4302	4789
55°	455	4205	4577
60°	465	4021	4241
65°	484	3740	3781
70°	515	3261	3195
75°	572	2659	2493
80°	624	1844	1680
85°	554	979	860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4870 cd/sqm



TEST NUMBER: P937876

CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.9	0.4
10°-20°	212.4	1.8
20°-30°	371.5	3.2
30°-40°	478.2	4.1
40°-50°	534.1	4.5
50°-60°	511.5	4.4
60°-70°	405.4	3.4
70°-80°	238.4	2.0
80°-90°	71.4	0.6
90°-100°	667.9	5.7
100°-110°	1755.8	14.9
110°-120°	1820.6	15.5
120°-130°	1460.4	12.4
130°-140°	1145.9	9.7
140°-150°	879.5	7.5
150°-160°	633.4	5.4
160°-170°	387.5	3.3
170°-180°	130.9	1.1
0°-30°	631.7	5.4
0°-40°	1109.9	9.4
0°-60°	2155.6	18.3
0°-90°	2870.8	24.4
90°-120°	4244.3	36.1
90°-150°	7730.1	65.8
90°-180°	8882.0	75.6
0°-180°	11752.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	370	370	370	370	370	
5°	361	387	436	493	511	33
15°	270	499	841	1020	1052	75
25°	173	566	1002	1046	1047	80
35°	117	541	943	997	1036	73
45°	80	431	834	955	998	62
55°	57	274	708	822	844	52
65°	45	145	525	591	599	45
75°	33	89	288	317	318	35
85°	12	27	72	79	80	13
90°	9	26	70	35	35	8
95°	88	346	1150	593	404	98
105°	316	479	1941	2947	2749	335
115°	562	682	1555	3102	3540	555
125°	782	876	1414	2390	2819	694
135°	932	1025	1370	1929	2188	721
145°	1080	1149	1353	1646	1775	677
155°	1221	1255	1353	1485	1528	561
165°	1318	1335	1353	1406	1424	372
175°	1370	1370	1362	1379	1379	130
180°	1370	1370	1370	1370	1370	



TEST NUMBER: P937876

CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4
2.5°	370.4	370.4	372.8	374.0	376.3	377.6	380.0	382.4	389.5	390.6	393.0
5°	360.9	365.7	381.1	387.1	403.8	426.4	435.9	451.4	483.6	493.1	499.1
7.5°	346.6	357.3	395.4	404.9	446.7	506.2	531.2	564.6	615.7	640.8	661.0
10°	323.9	346.6	414.5	437.2	505.0	595.5	642.0	688.5	765.8	800.4	813.5
12.5°	299.0	335.8	434.8	465.7	563.3	695.6	751.6	802.8	890.9	937.4	944.5
15°	270.4	320.4	453.8	499.1	625.3	779.0	840.9	904.0	986.2	1019.5	1027.9
17.5°	245.4	308.5	471.7	519.3	672.9	854.0	917.1	969.5	1036.2	1058.9	1064.8
20°	214.4	289.4	483.6	545.5	723.0	908.8	969.5	1010.0	1055.3	1069.6	1072.0
22.5°	191.7	269.2	490.7	555.0	756.3	942.2	993.3	1025.6	1056.5	1061.2	1062.4
25°	172.7	246.5	489.6	565.7	784.9	962.4	1001.7	1025.6	1043.4	1045.8	1045.8
27.5°	154.9	221.6	484.8	568.1	806.4	967.1	998.1	1014.8	1023.2	1027.9	1027.9
30°	139.3	197.8	472.9	563.3	815.9	962.4	987.4	995.7	1004.1	1011.3	1014.8
32.5°	127.4	175.1	455.0	553.8	817.0	950.4	968.4	973.1	985.0	1001.7	1007.6
35°	116.7	152.5	434.8	540.7	809.9	931.4	943.3	948.1	971.9	997.0	1005.2
37.5°	106.0	135.8	408.6	518.1	799.2	908.8	917.1	925.5	962.4	992.2	1001.7
40°	95.3	121.5	377.6	493.1	782.5	881.4	888.5	901.7	950.4	985.0	994.6
42.5°	86.9	109.6	344.2	466.9	761.1	850.4	861.2	880.2	936.2	973.1	983.8
45°	79.8	97.7	308.5	431.1	733.7	818.3	833.7	859.9	919.5	955.2	964.7
47.5°	72.6	89.3	271.6	394.3	703.9	786.1	806.4	836.1	896.9	931.4	939.8
50°	66.7	81.0	234.6	354.9	671.8	751.6	775.4	806.4	868.3	900.4	911.2
52.5°	61.9	73.9	200.1	315.6	634.8	715.8	743.3	775.4	833.7	864.7	871.8
55°	57.2	67.9	170.3	273.9	596.7	677.7	707.5	738.5	795.6	821.8	826.6
57.5°	54.8	63.1	145.3	234.6	556.2	634.8	668.2	696.8	750.4	770.6	775.4
60°	51.2	59.6	126.3	201.3	512.2	594.3	622.9	651.5	696.8	713.4	717.1
62.5°	47.7	57.2	112.0	169.2	466.9	546.7	575.2	601.5	639.6	651.5	656.3
65°	45.3	54.8	101.2	145.3	420.5	496.7	525.3	547.9	578.9	590.8	593.2
67.5°	42.9	52.4	92.9	125.0	374.0	446.7	468.1	489.6	513.4	525.3	526.4
70°	39.3	50.0	85.8	110.7	326.3	389.5	407.3	430.0	449.1	455.0	458.6
72.5°	36.9	46.4	81.0	100.1	277.5	334.7	351.4	364.4	381.1	387.1	387.1
75°	33.4	41.6	76.2	89.3	227.5	273.9	288.2	301.3	314.4	316.8	313.3
77.5°	29.7	36.9	65.5	75.0	177.5	216.8	228.7	235.9	246.5	248.9	250.1
80°	25.0	32.1	51.2	58.3	128.7	159.6	167.9	173.9	183.5	183.5	185.8
82.5°	19.1	25.0	36.9	41.6	86.9	109.6	116.7	120.3	126.3	126.3	126.3
85°	11.9	15.5	23.8	27.4	52.4	66.7	71.5	72.6	77.4	78.6	78.6
87.5°	5.9	8.3	15.5	16.7	27.4	34.5	34.5	36.9	36.9	35.7	34.5
90°	9.2	16.6	23.9	25.8	40.5	60.1	69.9	62.1	46.5	34.9	34.9
92.5°	36.8	99.3	161.9	177.5	249.5	345.5	393.6	344.9	247.7	174.7	167.7
95°	88.3	202.7	317.2	345.8	614.0	971.6	1150.3	1026.5	778.9	593.1	572.0
97.5°	152.6	253.6	354.6	379.8	827.0	1423.3	1721.4	1643.2	1486.6	1369.2	1329.2
100°	202.3	293.8	385.4	408.3	904.5	1566.2	1897.0	1902.7	1914.2	1922.8	1875.1
102.5°	244.6	330.0	415.4	436.8	940.1	1611.2	1946.7	2046.4	2245.8	2395.4	2354.5
105°	316.3	388.7	461.0	479.1	966.4	1616.2	1941.2	2164.7	2611.8	2947.1	2925.2
107.5°	389.9	457.3	524.7	541.6	971.3	1544.3	1830.8	2142.7	2766.3	3234.0	3239.3
110°	439.6	500.5	561.4	576.6	964.0	1480.6	1738.9	2087.5	2784.7	3307.5	3330.4



TEST NUMBER: P937876

CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	488.3	546.3	604.4	618.8	964.3	1424.9	1655.1	2011.9	2725.4	3260.6	3295.8
115°	561.8	615.4	668.8	682.3	973.2	1361.0	1555.0	1898.6	2586.0	3101.6	3150.4
117.5°	634.5	683.1	731.7	743.9	991.3	1321.1	1486.0	1796.2	2416.5	2881.8	2935.9
120°	676.7	722.6	768.3	779.8	1005.9	1307.6	1458.4	1741.8	2308.6	2733.8	2786.3
122.5°	718.1	764.3	810.5	822.0	1027.1	1300.5	1437.2	1692.4	2203.0	2585.8	2637.5
125°	781.6	823.7	865.8	876.3	1055.6	1294.7	1414.2	1631.1	2064.7	2389.9	2437.6
127.5°	833.1	875.7	918.1	928.8	1084.2	1291.3	1395.0	1581.1	1953.4	2232.6	2272.8
130°	860.6	906.5	952.2	963.7	1104.9	1293.4	1387.6	1553.3	1884.8	2133.3	2170.5
132.5°	889.2	935.0	980.7	992.2	1121.8	1294.7	1381.1	1529.5	1826.2	2048.7	2082.0
135°	931.5	973.2	1014.9	1025.3	1140.2	1293.5	1370.1	1494.3	1742.8	1929.2	1957.9
137.5°	974.7	1016.0	1057.3	1067.6	1167.8	1301.5	1368.2	1473.3	1683.4	1840.9	1864.4
140°	1010.5	1048.6	1086.6	1096.1	1184.7	1302.8	1361.8	1452.6	1634.0	1770.1	1792.1
142.5°	1038.2	1073.3	1108.4	1117.2	1198.7	1307.5	1361.8	1441.5	1600.9	1720.4	1739.3
145°	1080.4	1111.1	1141.8	1149.4	1217.2	1307.5	1352.6	1417.8	1548.2	1646.0	1660.3
147.5°	1122.8	1152.6	1182.5	1189.9	1244.2	1316.5	1352.6	1403.9	1506.5	1583.5	1595.3
150°	1150.3	1177.3	1204.3	1211.1	1258.2	1321.2	1352.6	1395.9	1482.6	1547.6	1557.2
152.5°	1178.8	1199.2	1219.7	1224.8	1267.4	1324.2	1352.6	1389.6	1463.6	1519.1	1526.4
155°	1221.2	1236.3	1251.4	1255.2	1287.7	1330.9	1352.6	1382.1	1441.0	1485.1	1489.9
157.5°	1252.4	1267.1	1281.8	1285.5	1307.8	1337.7	1352.6	1375.5	1421.2	1455.6	1459.0
160°	1273.6	1285.0	1296.5	1299.3	1317.1	1340.8	1352.6	1372.2	1411.5	1440.9	1442.8
162.5°	1294.7	1303.2	1311.8	1314.0	1326.8	1344.0	1352.6	1369.1	1402.2	1427.1	1429.0
165°	1317.7	1325.5	1333.2	1335.2	1341.0	1348.7	1352.6	1364.5	1388.2	1406.0	1407.9
167.5°	1338.8	1342.5	1346.2	1347.1	1352.0	1358.6	1361.8	1369.6	1385.1	1396.7	1397.5
170°	1352.6	1356.3	1360.1	1360.9	1361.2	1361.7	1361.8	1369.6	1385.1	1396.7	1396.7
172.5°	1360.0	1360.8	1361.7	1361.8	1361.8	1361.8	1361.8	1368.0	1380.2	1389.5	1388.7
175°	1370.1	1370.1	1370.1	1370.1	1367.3	1363.7	1361.8	1365.7	1373.5	1379.3	1379.3
177.5°	1370.1	1370.1	1370.1	1370.1	1368.0	1365.1	1363.7	1366.7	1372.8	1377.5	1376.7
180°	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1



TEST NUMBER: P937876

CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	370.4	370.4
2.5°	395.4	393.0
5°	508.6	511.0
7.5°	684.8	683.7
10°	851.6	862.3
12.5°	973.1	975.5
15°	1047.0	1051.7
17.5°	1075.5	1076.7
20°	1076.7	1074.3
22.5°	1063.6	1061.2
25°	1048.1	1047.0
27.5°	1033.8	1035.1
30°	1027.9	1031.5
32.5°	1027.9	1033.8
35°	1030.3	1036.2
37.5°	1029.1	1036.2
40°	1024.3	1032.7
42.5°	1011.3	1017.2
45°	991.0	998.1
47.5°	964.7	969.5
50°	931.4	936.2
52.5°	889.7	890.9
55°	839.7	844.5
57.5°	786.1	787.3
60°	726.6	730.1
62.5°	663.4	663.4
65°	596.7	599.1
67.5°	527.6	533.6
70°	457.4	458.6
72.5°	388.3	388.3
75°	316.8	318.0
77.5°	248.9	248.9
80°	184.6	185.8
82.5°	127.4	129.8
85°	79.8	79.8
87.5°	36.9	33.4
90°	34.9	34.9
92.5°	139.9	112.2
95°	487.9	403.7
97.5°	1169.0	1008.8
100°	1684.2	1493.3
102.5°	2191.1	2027.6
105°	2837.2	2749.4
107.5°	3260.6	3281.8
110°	3422.0	3513.5



TEST NUMBER: P937876

CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3436.4	3577.0
115°	3345.3	3540.2
117.5°	3152.0	3368.3
120°	2996.4	3206.4
122.5°	2844.8	3052.0
125°	2628.5	2819.3
127.5°	2433.9	2594.9
130°	2319.3	2468.0
132.5°	2215.3	2348.5
135°	2072.8	2187.6
137.5°	1958.4	2052.4
140°	1880.0	1967.8
142.5°	1814.9	1890.6
145°	1717.5	1774.7
147.5°	1642.7	1690.1
150°	1595.6	1634.0
152.5°	1555.3	1584.4
155°	1509.1	1528.2
157.5°	1472.5	1486.0
160°	1450.5	1458.4
162.5°	1436.3	1443.7
165°	1415.6	1423.5
167.5°	1400.8	1404.1
170°	1396.7	1396.7
172.5°	1385.8	1383.0
175°	1379.3	1379.3
177.5°	1373.4	1370.1
180°	1370.1	1370.1



TEST NUMBER: P937876
 CATALOG NUMBER: SQ4-FB-125U-050D-940-1D-UNV-STD-W-8

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	0.00	0.56	1.02	1.70	3.29	13.05	13.74	14.20	14.87	16.47
	3H	0.56	1.18	1.72	2.32	3.93	14.88	15.49	16.03	16.64	18.25
	4H	0.85	1.44	2.01	2.58	4.20	15.51	16.10	16.68	17.24	18.86
	6H	1.09	1.63	2.26	2.78	4.40	15.93	16.47	17.10	17.62	19.25
	8H	1.16	1.67	2.33	2.83	4.45	16.05	16.56	17.22	17.73	19.34
	12H	1.17	1.65	2.34	2.81	4.45	16.11	16.60	17.29	17.76	19.39
4H	2H	7.07	7.65	8.24	8.80	10.41	13.30	13.89	14.47	15.03	16.65
	3H	8.62	9.11	9.79	10.28	11.90	15.33	15.82	16.51	16.99	18.62
	4H	8.70	9.15	9.88	10.31	11.96	16.09	16.54	17.27	17.70	19.35
	6H	8.70	9.09	9.88	10.27	11.90	16.62	17.01	17.80	18.19	19.82
	8H	8.68	9.04	9.86	10.21	11.86	16.78	17.14	17.96	18.31	19.96
	12H	8.62	8.95	9.82	10.13	11.79	16.86	17.19	18.06	18.37	20.03
8H	4H	10.13	10.49	11.31	11.67	13.32	16.14	16.50	17.32	17.67	19.32
	6H	10.37	10.66	11.57	11.88	13.53	16.76	17.06	17.96	18.27	19.92
	8H	10.38	10.64	11.59	11.83	13.50	16.97	17.23	18.18	18.43	20.09
	12H	10.34	10.57	11.55	11.76	13.46	17.11	17.34	18.32	18.53	20.23
12H	4H	10.27	10.60	11.46	11.78	13.43	16.08	16.41	17.28	17.59	19.25
	6H	10.62	10.88	11.83	12.08	13.74	16.74	17.00	17.94	18.19	19.86
	8H	10.68	10.91	11.89	12.10	13.80	16.96	17.19	18.17	18.38	20.08