

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: P936549

Luminaire Tested: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

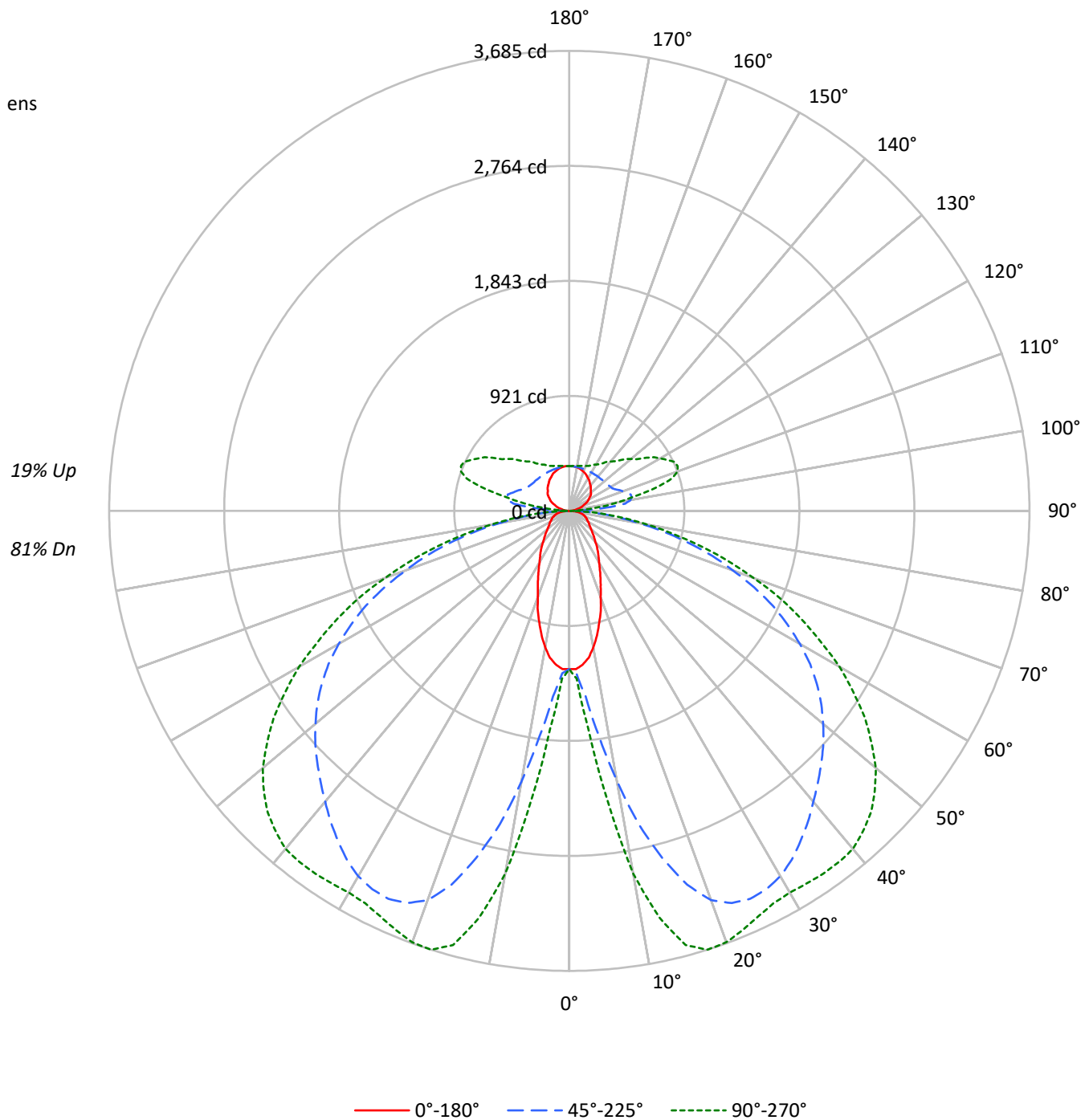
Test Method: LM-79-2019  
Report Number: P936549  
REPORT IS A COMBINATION OF REPORTS P933432 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12139.8 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 148.8  
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: P936549  
CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P936549

CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

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

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

	0°	45°	90°
0°	3922	3922	3922
5°	3832	4534	5271
10°	3478	6610	8738
15°	2957	8638	10552
20°	2408	10012	10754
25°	2010	10480	10535
30°	1695	10549	10515
35°	1500	10377	10787
40°	1308	10152	11068
45°	1185	9988	11112
50°	1088	9841	10928
55°	1043	9625	10443
60°	1069	9207	9678
65°	1114	8569	8627
70°	1189	7478	7289
75°	1322	6103	5688
80°	1456	4237	3833
85°	1322	2252	1961

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11112 cd/sqm



TEST NUMBER: P936549

CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.0	1.4
10°-20°	726.8	6.0
20°-30°	1271.4	10.5
30°-40°	1636.6	13.5
40°-50°	1828.0	15.1
50°-60°	1750.8	14.4
60°-70°	1387.6	11.4
70°-80°	815.9	6.7
80°-90°	228.0	1.9
90°-100°	175.3	1.4
100°-110°	460.7	3.8
110°-120°	477.7	3.9
120°-130°	383.2	3.2
130°-140°	300.7	2.5
140°-150°	230.8	1.9
150°-160°	166.2	1.4
160°-170°	101.7	0.8
170°-180°	34.4	0.3
0°-30°	2162.2	17.8
0°-40°	3798.8	31.3
0°-60°	7377.7	60.8
0°-90°	9809.2	80.8
90°-120°	1113.7	9.2
90°-150°	2028.3	16.7
90°-180°	2331.0	19.2
0°-180°	12139.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1235	1325	1492	1688	1749	114
15°	925	1708	2878	3490	3600	258
25°	591	1936	3428	3579	3583	272
35°	400	1851	3229	3412	3547	249
45°	273	1476	2854	3269	3416	211
55°	196	938	2422	2813	2890	178
65°	155	497	1798	2022	2050	154
75°	114	306	987	1084	1088	119
85°	41	94	245	269	273	43
90°	2	7	18	9	9	5
95°	23	91	302	156	106	26
105°	83	126	509	773	721	88
115°	147	179	408	814	929	146
125°	205	230	371	627	740	182
135°	244	269	360	506	574	189
145°	284	302	355	432	466	178
155°	320	329	355	390	401	147
165°	346	350	355	369	374	98
175°	360	360	357	362	362	34
180°	360	360	360	360	360	



TEST NUMBER: P936549  
 CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9	1267.9
2.5°	1267.9	1267.9	1276.0	1280.1	1288.2	1292.3	1300.5	1308.6	1333.1	1337.2	1345.3
5°	1235.2	1251.5	1304.5	1324.9	1382.0	1459.5	1492.1	1545.1	1655.1	1687.7	1708.1
7.5°	1186.3	1223.0	1353.5	1386.1	1528.8	1732.6	1818.2	1932.3	2107.6	2193.2	2262.5
10°	1108.9	1186.3	1418.7	1496.1	1728.5	2038.3	2197.2	2356.2	2621.2	2739.4	2784.3
12.5°	1023.3	1149.6	1488.0	1594.0	1928.2	2380.7	2572.3	2747.6	3049.3	3208.3	3232.7
15°	925.4	1096.6	1553.2	1708.1	2140.2	2666.1	2878.0	3094.1	3375.4	3489.6	3518.1
17.5°	839.8	1055.9	1614.4	1777.4	2303.2	2922.9	3139.0	3318.3	3546.6	3624.1	3644.5
20°	733.8	990.6	1655.1	1867.1	2474.5	3110.4	3318.3	3456.9	3611.9	3660.8	3668.9
22.5°	656.3	921.3	1679.6	1899.7	2588.6	3224.6	3399.9	3509.9	3615.9	3632.2	3636.3
25°	591.1	843.9	1675.5	1936.4	2686.4	3293.9	3428.4	3509.9	3571.1	3579.2	3579.2
27.5°	530.0	758.3	1659.2	1944.5	2759.8	3310.2	3416.2	3473.2	3501.8	3518.1	3518.1
30°	477.0	676.7	1618.4	1928.2	2792.4	3293.9	3379.5	3408.0	3436.6	3461.0	3473.2
32.5°	436.2	599.3	1557.3	1895.6	2796.5	3253.1	3314.3	3330.6	3371.3	3428.4	3448.8
35°	399.5	521.8	1488.0	1850.8	2772.1	3187.9	3228.6	3245.0	3326.5	3412.1	3440.6
37.5°	362.8	464.7	1398.3	1773.3	2735.4	3110.4	3139.0	3167.5	3293.9	3395.8	3428.4
40°	326.1	415.8	1292.3	1687.7	2678.3	3016.7	3041.1	3086.0	3253.1	3371.3	3403.9
42.5°	297.6	375.1	1178.2	1598.1	2604.9	2910.7	2947.4	3012.6	3204.2	3330.6	3367.3
45°	273.1	334.3	1055.9	1475.8	2511.1	2800.6	2853.6	2943.3	3147.1	3269.4	3302.0
47.5°	248.7	305.8	929.5	1349.4	2409.2	2690.5	2759.8	2861.7	3069.7	3187.9	3216.4
50°	228.3	277.2	803.1	1214.9	2299.2	2572.3	2653.8	2759.8	2971.8	3081.9	3118.6
52.5°	212.0	252.8	684.9	1080.3	2172.8	2450.0	2543.8	2653.8	2853.6	2959.6	2984.0
55°	195.7	232.4	583.0	937.6	2042.4	2319.5	2421.5	2527.5	2723.1	2812.8	2829.1
57.5°	187.5	216.1	497.4	803.1	1903.8	2172.8	2286.9	2384.8	2568.2	2637.5	2653.8
60°	175.3	203.8	432.1	689.0	1752.9	2034.2	2132.0	2229.9	2384.8	2441.8	2454.1
62.5°	163.1	195.7	383.2	578.9	1598.1	1871.2	1969.0	2058.7	2189.1	2229.9	2246.2
65°	154.9	187.5	346.5	497.4	1439.1	1700.0	1797.8	1875.2	1981.2	2022.0	2030.1
67.5°	146.8	179.4	318.0	428.1	1280.1	1528.8	1602.1	1675.5	1757.0	1797.8	1801.9
70°	134.5	171.2	293.5	379.1	1117.0	1333.1	1394.2	1471.7	1536.9	1557.3	1569.5
72.5°	126.4	159.0	277.2	342.4	949.9	1145.6	1202.6	1247.5	1304.5	1324.9	1324.9
75°	114.1	142.7	260.9	305.8	778.6	937.6	986.6	1031.4	1076.2	1084.4	1072.2
77.5°	101.9	126.4	224.2	256.8	607.4	742.0	782.7	807.2	843.9	852.0	856.1
80°	85.6	110.1	175.3	199.8	440.3	546.3	574.8	595.2	627.8	627.8	636.0
82.5°	65.2	85.6	126.4	142.7	297.6	375.1	399.5	411.7	432.1	432.1	432.1
85°	40.8	53.0	81.5	93.8	179.4	228.3	244.6	248.7	265.0	269.1	269.1
87.5°	20.4	28.5	53.0	57.1	93.8	118.2	118.2	126.4	126.4	122.3	118.2
90°	2.4	4.3	6.3	6.7	10.6	15.7	18.3	16.3	12.2	9.2	9.2
92.5°	9.6	26.0	42.5	46.6	65.4	90.7	103.3	90.5	65.0	45.9	44.0
95°	23.1	53.2	83.2	90.7	161.1	255.0	301.8	269.3	204.4	155.6	150.1
97.5°	40.1	66.6	93.1	99.7	217.0	373.5	451.7	431.1	390.1	359.3	348.7
100°	53.1	77.1	101.1	107.1	237.4	411.0	497.8	499.3	502.3	504.5	492.0
102.5°	64.2	86.6	109.0	114.6	246.7	422.8	510.8	537.0	589.2	628.5	617.7
105°	83.0	102.0	120.9	125.7	253.6	424.1	509.3	568.0	685.3	773.3	767.5
107.5°	102.3	120.0	137.7	142.1	254.9	405.2	480.4	562.2	725.8	848.6	850.0
110°	115.3	131.3	147.3	151.3	252.9	388.5	456.3	547.7	730.6	867.9	873.9



TEST NUMBER: P936549

CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	128.2	143.3	158.6	162.4	253.0	373.9	434.3	528.0	715.2	855.6	864.8
115°	147.4	161.5	175.5	179.1	255.4	357.1	408.0	498.2	678.5	813.8	826.6
117.5°	166.5	179.2	192.0	195.2	260.1	346.7	389.9	471.4	634.1	756.2	770.4
120°	177.5	189.6	201.6	204.6	263.9	343.0	382.6	457.0	605.8	717.3	731.1
122.5°	188.5	200.6	212.6	215.7	269.5	341.2	377.1	444.1	578.0	678.5	692.0
125°	205.1	216.2	227.2	230.0	277.0	339.7	371.1	427.9	541.7	627.1	639.6
127.5°	218.6	229.7	240.9	243.7	284.5	338.9	366.0	414.8	512.6	585.8	596.4
130°	225.8	237.8	249.9	252.9	290.0	339.3	364.1	407.6	494.6	559.8	569.6
132.5°	233.4	245.3	257.4	260.3	294.4	339.7	362.4	401.3	479.2	537.6	546.4
135°	244.4	255.4	266.3	269.0	299.2	339.4	359.5	392.1	457.3	506.2	513.8
137.5°	255.8	266.6	277.4	280.1	306.4	341.5	359.0	386.6	441.6	483.0	489.2
140°	265.2	275.1	285.1	287.6	310.8	341.8	357.3	381.1	428.7	464.5	470.2
142.5°	272.4	281.6	290.8	293.2	314.5	343.0	357.3	378.2	420.0	451.4	456.4
145°	283.5	291.6	299.6	301.6	319.4	343.0	354.9	372.0	406.2	431.9	435.6
147.5°	294.6	302.4	310.3	312.2	326.4	345.5	354.9	368.4	395.3	415.5	418.6
150°	301.8	308.9	316.0	317.7	330.1	346.7	354.9	366.3	389.1	406.1	408.6
152.5°	309.3	314.7	320.0	321.4	332.5	347.5	354.9	364.6	384.1	398.6	400.5
155°	320.4	324.3	328.3	329.3	337.8	349.2	354.9	362.6	378.1	389.7	391.0
157.5°	328.6	332.4	336.4	337.3	343.2	351.0	354.9	360.9	372.9	381.9	382.8
160°	334.2	337.2	340.2	341.0	345.6	351.8	354.9	360.1	370.3	378.1	378.5
162.5°	339.7	342.0	344.2	344.8	348.2	352.7	354.9	359.3	367.9	374.4	374.9
165°	345.8	347.8	349.9	350.3	351.9	353.9	354.9	358.1	364.2	368.9	369.4
167.5°	351.3	352.3	353.2	353.5	354.8	356.5	357.3	359.3	363.4	366.5	366.7
170°	354.9	355.9	356.9	357.1	357.2	357.3	357.3	359.3	363.4	366.5	366.5
172.5°	356.9	357.1	357.3	357.3	357.3	357.3	357.3	358.9	362.2	364.6	364.4
175°	359.5	359.5	359.5	359.5	358.8	357.8	357.3	358.4	360.4	361.9	361.9
177.5°	359.5	359.5	359.5	359.5	358.9	358.2	357.8	358.6	360.2	361.4	361.2
180°	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5



TEST NUMBER: P936549

CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1267.9	1267.9
2.5°	1353.5	1345.3
5°	1740.7	1748.9
7.5°	2344.0	2339.9
10°	2914.7	2951.4
12.5°	3330.6	3338.7
15°	3583.3	3599.6
17.5°	3681.2	3685.2
20°	3685.2	3677.1
22.5°	3640.4	3632.2
25°	3587.4	3583.3
27.5°	3538.5	3542.6
30°	3518.1	3530.3
32.5°	3518.1	3538.5
35°	3526.2	3546.6
37.5°	3522.2	3546.6
40°	3505.9	3534.4
42.5°	3461.0	3481.4
45°	3391.7	3416.2
47.5°	3302.0	3318.3
50°	3187.9	3204.2
52.5°	3045.2	3049.3
55°	2874.0	2890.3
57.5°	2690.5	2694.6
60°	2486.7	2498.9
62.5°	2270.6	2270.6
65°	2042.4	2050.5
67.5°	1805.9	1826.3
70°	1565.4	1569.5
72.5°	1329.0	1329.0
75°	1084.4	1088.5
77.5°	852.0	852.0
80°	631.9	636.0
82.5°	436.2	444.4
85°	273.1	273.1
87.5°	126.4	114.1
90°	9.2	9.2
92.5°	36.8	29.5
95°	128.0	105.9
97.5°	306.7	264.7
100°	442.0	391.9
102.5°	574.9	532.0
105°	744.5	721.4
107.5°	855.6	861.1
110°	897.9	921.9





TEST NUMBER: P936549

CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	901.7	938.5
115°	877.8	928.9
117.5°	827.1	883.8
120°	786.2	841.3
122.5°	746.5	800.8
125°	689.6	739.7
127.5°	638.6	680.9
130°	608.6	647.6
132.5°	581.3	616.2
135°	543.9	574.0
137.5°	513.8	538.6
140°	493.3	516.3
142.5°	476.3	496.1
145°	450.6	465.7
147.5°	431.1	443.5
150°	418.7	428.7
152.5°	408.1	415.7
155°	396.0	401.0
157.5°	386.4	389.9
160°	380.6	382.6
162.5°	376.8	378.8
165°	371.5	373.5
167.5°	367.5	368.4
170°	366.5	366.5
172.5°	363.6	362.9
175°	361.9	361.9
177.5°	360.4	359.5
180°	359.5	359.5



TEST NUMBER: P936549  
 CATALOG NUMBER: SQ4-FB-025U-125D-930-1D-UNV-STD-W-12

**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	8.18	9.49	8.81	10.14	10.88	21.37	22.68	22.00	23.33	24.07
	3H	8.92	10.10	9.56	10.76	11.54	23.25	24.43	23.89	25.09	25.87
	4H	9.24	10.35	9.90	11.02	11.82	23.92	25.03	24.58	25.70	26.50
	6H	9.51	10.54	10.19	11.22	12.03	24.38	25.41	25.05	26.09	26.90
	8H	9.59	10.57	10.28	11.28	12.09	24.51	25.50	25.20	26.20	27.01
	12H	9.62	10.56	10.32	11.26	12.10	24.60	25.54	25.29	26.24	27.08
4H	2H	15.46	16.57	16.12	17.24	18.04	21.70	22.81	22.36	23.48	24.28
	3H	17.06	18.00	17.74	18.71	19.52	23.79	24.72	24.47	25.43	26.25
	4H	17.18	18.03	17.87	18.74	19.58	24.58	25.43	25.28	26.14	26.99
	6H	17.21	17.95	17.93	18.69	19.55	25.15	25.89	25.86	26.63	27.48
	8H	17.20	17.90	17.92	18.63	19.50	25.32	26.02	26.05	26.75	27.62
	12H	17.18	17.81	17.92	18.57	19.44	25.44	26.07	26.19	26.83	27.70
8H	4H	18.66	19.36	19.38	20.09	20.96	24.68	25.37	25.40	26.11	26.97
	6H	18.92	19.50	19.68	20.28	21.15	25.33	25.91	26.08	26.69	27.55
	8H	18.95	19.47	19.71	20.24	21.13	25.56	26.08	26.32	26.85	27.74
	12H	18.94	19.39	19.71	20.16	21.11	25.73	26.18	26.50	26.95	27.90
12H	4H	18.83	19.46	19.57	20.22	21.09	24.65	25.28	25.39	26.04	26.91
	6H	19.19	19.71	19.95	20.49	21.37	25.32	25.84	26.08	26.62	27.50
	8H	19.28	19.74	20.05	20.51	21.45	25.57	26.03	26.34	26.80	27.74