

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P1435715

Luminaire Tested: SQ2W-FA-0U-050D-L830-UNV-STD-W-WM-4

Issue Date: 3/24/2026

**Test Information**

Test Method: LM-79-2024  
Report Number: P1435715  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2502-345-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/24/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2W-FA-0U-050D-L830-UNV-STD-W-WM-4  
Description: CORELITE SQ2W WALL MOUNTED LED LUMINAIRE  
DOWNLIGHT - FROSTED CONTINUOUS ASYMMETRIC ROLL LENS  
UPLIGHT - ASYMMETRIC ROLL LENS  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT N/A - DIRECT ONLY  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

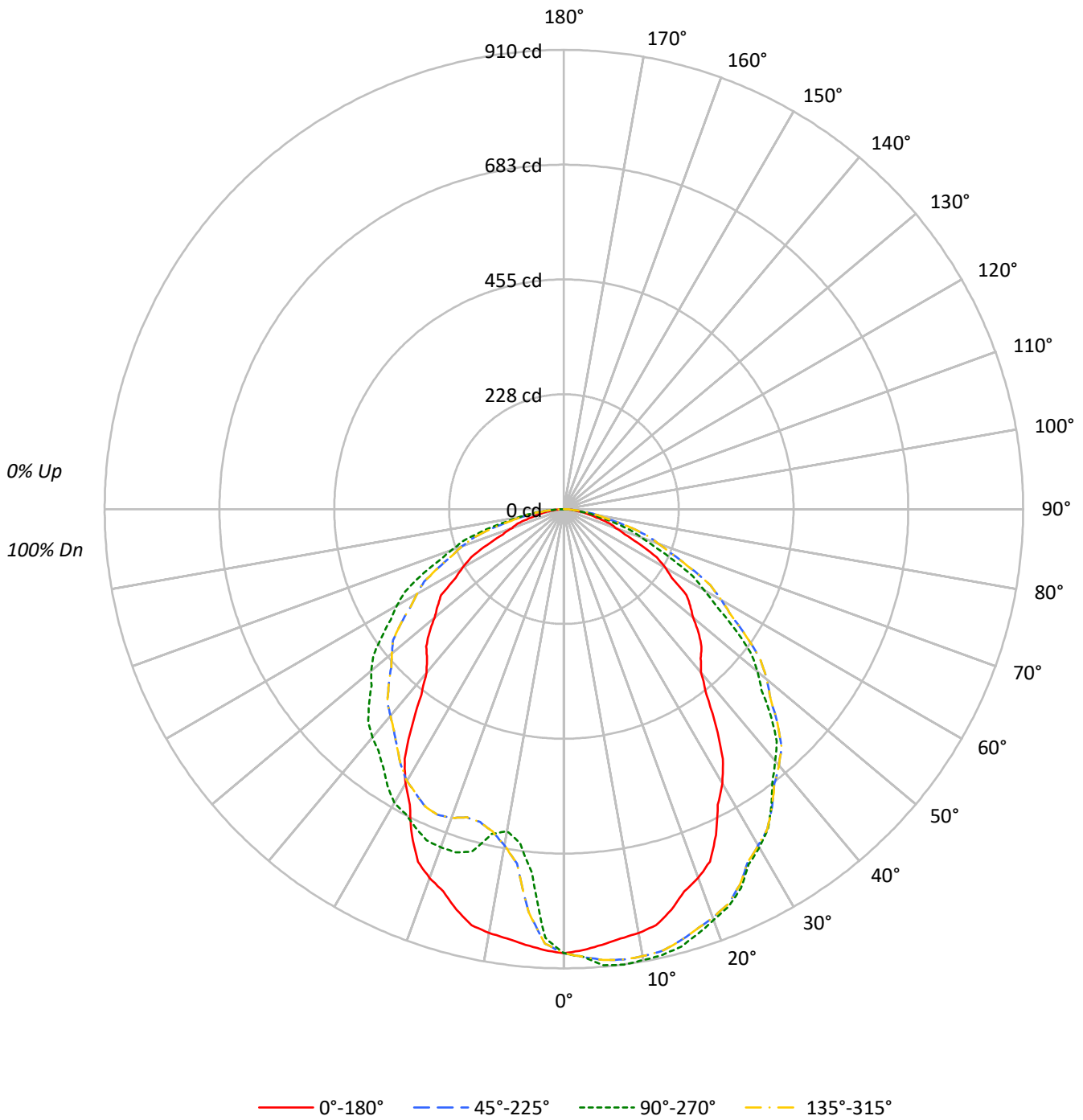
Lumens per Lamp: N/A  
Luminaire Lumens: 2185.7 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.8  
Input Voltage (V): 120  
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

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CATALOG NUMBER: SQ2W-FA-0U-050D-L830-UNV-STD-W-WM-4

### Luminous Intensity Polar Plot





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**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	47	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	90°	180°	270°
0°	14210	14210	14210	14210
5°	14044	14706	14044	11721
10°	13981	14876	13981	10625
15°	13741	14997	13741	11746
20°	13364	14888	13364	12251
25°	12702	14767	12702	12397
30°	11702	14437	11702	12528
35°	10354	14120	10354	12305
40°	8915	13733	8915	12439
45°	8802	13241	8802	12462
50°	8397	12597	8397	12509
55°	8355	11620	8355	12388
60°	7492	10356	7492	12338
65°	6388	9123	6388	11988
70°	5155	7728	5155	11112
75°	4467	6382	4467	10212
80°	3803	4760	3803	8247
85°	2519	2519	2519	5057

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 40°  
 Vertical Angle: 45°  
 Luminance: 13657 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.2	3.6
10°-20°	221.3	10.1
20°-30°	336.0	15.4
30°-40°	394.5	18.1
40°-50°	400.4	18.3
50°-60°	350.7	16.0
60°-70°	248.7	11.4
70°-80°	128.1	5.9
80°-90°	26.9	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	636.5	29.1
0°-40°	1031.0	47.2
0°-60°	1782.0	81.5
0°-90°	2185.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2185.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	880	880	880	880	880	
5°	866	907	866	723	866	82
15°	822	897	822	703	822	231
25°	713	829	713	696	713	325
35°	525	716	525	624	525	327
45°	386	580	386	546	386	295
55°	297	413	297	440	297	257
65°	167	239	167	314	167	167
75°	72	102	72	164	72	77
85°	14	14	14	27	14	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1
2.5°	874.7	880.7	886.8	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3
5°	866.5	877.1	887.7	892.6	895.7	897.9	899.4	901.3	904.4	907.4	904.4
7.5°	858.3	872.5	886.8	893.8	898.3	901.9	904.7	907.1	908.6	910.1	908.6
10°	852.8	869.5	886.2	893.8	898.3	901.3	902.9	904.4	905.9	907.4	905.9
12.5°	844.6	862.5	880.4	889.2	895.0	898.6	900.1	901.6	903.2	904.7	903.2
15°	822.1	846.4	870.6	880.1	884.7	888.5	891.5	894.1	895.7	897.2	895.7
17.5°	794.1	823.6	853.0	864.9	870.9	875.3	878.1	880.4	881.6	882.8	881.6
20°	777.8	809.6	841.5	854.0	860.0	863.8	865.3	866.5	866.5	866.5	866.5
22.5°	755.9	791.4	826.9	840.3	846.4	849.6	849.9	850.4	851.6	852.8	851.6
25°	713.0	753.9	794.8	811.9	821.0	824.8	823.3	822.9	825.9	828.9	825.9
27.5°	660.4	712.0	763.5	781.0	787.0	790.8	792.3	793.5	793.5	793.5	793.5
30°	627.7	685.3	742.9	761.9	767.9	771.7	773.2	774.4	774.4	774.4	774.4
32.5°	586.7	655.3	723.8	744.6	749.4	752.0	752.3	752.5	752.5	752.5	752.5
35°	525.3	608.7	692.1	715.2	718.3	719.8	719.8	719.4	717.9	716.4	717.9
37.5°	463.9	558.5	653.1	680.2	684.8	686.0	683.8	681.9	680.4	678.8	680.4
40°	423.0	526.1	629.2	658.4	662.9	662.9	658.4	654.6	653.1	651.6	653.1
42.5°	401.2	503.1	604.9	633.8	638.4	637.8	632.0	627.3	625.8	624.3	625.8
45°	385.5	476.4	567.4	593.6	598.1	597.4	591.3	586.0	583.0	579.9	583.0
47.5°	361.6	441.6	521.7	547.4	555.0	554.2	545.1	537.5	534.5	531.5	534.5
50°	334.3	413.1	492.0	517.4	525.0	524.2	515.1	507.5	504.5	501.5	504.5
52.5°	315.2	389.2	463.2	486.4	492.8	490.8	480.5	472.0	469.0	466.0	469.0
55°	296.8	358.9	421.1	440.1	444.6	441.6	431.0	421.9	417.3	412.8	417.3
57.5°	253.8	312.9	372.1	390.5	395.3	391.7	379.6	369.2	364.0	358.9	364.0
60°	232.0	285.0	338.1	355.9	362.0	358.9	346.8	335.8	328.2	320.7	328.2
62.5°	207.4	254.4	301.4	319.5	328.0	326.2	314.1	303.1	295.5	287.9	295.5
65°	167.2	208.1	249.0	267.2	277.8	277.1	264.9	254.0	246.4	238.8	246.4
67.5°	131.0	166.2	201.3	219.2	231.4	230.8	217.4	205.9	199.8	193.8	199.8
70°	109.2	139.5	169.8	186.5	198.6	198.6	186.5	175.9	169.8	163.7	169.8
72.5°	95.5	118.6	141.6	157.4	170.7	170.7	157.4	146.2	141.3	136.5	141.3
75°	71.6	85.3	98.9	113.7	128.9	130.4	118.3	108.4	105.4	102.3	105.4
77.5°	51.9	58.2	64.6	76.2	89.5	91.0	80.7	72.7	71.5	70.3	71.5
80°	40.9	42.5	44.0	53.4	65.6	67.1	58.0	51.2	51.2	51.2	51.2
82.5°	27.3	28.8	30.3	37.1	45.6	46.5	39.8	34.5	33.3	32.1	33.3
85°	13.6	13.6	13.6	15.9	19.0	19.0	15.9	13.6	13.6	13.6	13.6
87.5°	2.7	2.7	2.7	3.6	4.9	4.9	3.6	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1
2.5°	888.3	888.3	888.3	888.3	888.3	886.8	880.7	874.7	874.7	874.7	870.1
5°	901.3	899.4	897.9	895.7	892.6	887.7	877.1	866.5	861.9	857.4	838.0
7.5°	907.1	904.7	901.9	898.3	893.8	886.8	872.5	858.3	838.0	817.6	774.6
10°	904.4	902.9	901.3	898.3	893.8	886.2	869.5	852.8	811.9	771.0	730.0
12.5°	901.6	900.1	898.6	895.0	889.2	880.4	862.5	844.6	786.7	728.8	691.8
15°	894.1	891.5	888.5	884.7	880.1	870.6	846.4	822.1	756.9	691.7	660.7
17.5°	880.4	878.1	875.3	870.9	864.9	853.0	823.6	794.1	725.9	657.7	637.7
20°	866.5	865.3	863.8	860.0	854.0	841.5	809.6	777.8	709.5	641.3	632.2
22.5°	850.4	849.9	849.6	846.4	840.3	826.9	791.4	755.9	688.9	621.9	622.2
25°	822.9	823.3	824.8	821.0	811.9	794.8	753.9	713.0	653.8	594.7	604.9
27.5°	793.5	792.3	790.8	787.0	781.0	763.5	712.0	660.4	613.7	567.0	584.0
30°	774.4	773.2	771.7	767.9	761.9	742.9	685.3	627.7	588.3	548.8	568.5
32.5°	752.5	752.3	752.0	749.4	744.6	723.8	655.3	586.7	558.2	529.7	550.4
35°	719.4	719.8	719.8	718.3	715.2	692.1	608.7	525.3	513.2	501.1	525.3
37.5°	681.9	683.8	686.0	684.8	680.2	653.1	558.5	463.9	467.9	471.8	501.2
40°	654.6	658.4	662.9	662.9	658.4	629.2	526.1	423.0	436.6	450.3	482.1
42.5°	627.3	632.0	637.8	638.4	633.8	604.9	503.1	401.2	416.0	430.9	463.9
45°	586.0	591.3	597.4	598.1	593.6	567.4	476.4	385.5	394.6	403.7	435.5
47.5°	537.5	545.1	554.2	555.0	547.4	521.7	441.6	361.6	368.3	374.9	407.5
50°	507.5	515.1	524.2	525.0	517.4	492.0	413.1	334.3	343.4	352.5	386.6
52.5°	472.0	480.5	490.8	492.8	486.4	463.2	389.2	315.2	320.7	326.1	363.0
55°	421.9	431.0	441.6	444.6	440.1	421.1	358.9	296.8	292.2	287.7	325.2
57.5°	369.2	379.6	391.7	395.3	390.5	372.1	312.9	253.8	249.9	245.9	286.5
60°	335.8	346.8	358.9	362.0	355.9	338.1	285.0	232.0	224.4	216.8	259.3
62.5°	303.1	314.1	326.2	328.0	319.5	301.4	254.4	207.4	202.3	197.1	238.3
65°	254.0	264.9	277.1	277.8	267.2	249.0	208.1	167.2	170.2	173.2	210.4
67.5°	205.9	217.4	230.8	231.4	219.2	201.3	166.2	131.0	141.0	151.0	184.4
70°	175.9	186.5	198.6	198.6	186.5	169.8	139.5	109.2	122.8	136.5	167.2
72.5°	146.2	157.4	170.7	170.7	157.4	141.6	118.6	95.5	109.2	122.8	148.0
75°	108.4	118.3	130.4	128.9	113.7	98.9	85.3	71.6	85.3	98.9	118.3
77.5°	72.7	80.7	91.0	89.5	76.2	64.6	58.2	51.9	63.1	74.3	87.8
80°	51.2	58.0	67.1	65.6	53.4	44.0	42.5	40.9	48.5	56.1	66.0
82.5°	34.5	39.8	46.5	45.6	37.1	30.3	28.8	27.3	33.7	40.0	46.8
85°	13.6	15.9	19.0	19.0	15.9	13.6	13.6	13.6	16.7	19.7	22.7
87.5°	2.7	3.6	4.9	4.9	3.6	2.7	2.7	2.7	3.9	5.2	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1	880.1
2.5°	864.0	859.2	855.6	852.5	851.3	850.1	851.3	852.5	855.6	859.2	864.0
5°	813.8	788.0	760.7	738.4	730.8	723.2	730.8	738.4	760.7	788.0	813.8
7.5°	724.0	692.9	681.3	672.1	669.7	667.2	669.7	672.1	681.3	692.9	724.0
10°	689.1	664.1	655.0	648.1	648.1	648.1	648.1	648.1	655.0	664.1	689.1
12.5°	661.8	646.5	645.9	646.9	653.0	659.1	653.0	646.9	645.9	646.5	661.8
15°	640.9	643.2	667.5	687.6	695.1	702.7	695.1	687.6	667.5	643.2	640.9
17.5°	633.7	646.8	676.8	700.8	706.9	713.0	706.9	700.8	676.8	646.8	633.7
20°	642.8	659.5	682.3	700.8	706.9	713.0	706.9	700.8	682.3	659.5	642.8
22.5°	645.0	665.3	683.2	698.1	704.2	710.2	704.2	698.1	683.2	665.3	645.0
25°	638.3	662.5	677.7	689.8	692.9	695.9	692.9	689.8	677.7	662.5	638.3
27.5°	622.2	648.9	664.1	676.0	678.1	680.2	678.1	676.0	664.1	648.9	622.2
30°	608.0	635.3	650.4	662.9	667.5	672.0	667.5	662.9	650.4	635.3	608.0
32.5°	587.3	615.2	634.0	648.4	649.3	650.2	649.3	648.4	634.0	615.2	587.3
35°	561.7	590.5	611.8	627.3	625.8	624.3	625.8	627.3	611.8	590.5	561.7
37.5°	539.1	567.3	585.8	600.2	602.0	603.8	602.0	600.2	585.8	567.3	539.1
40°	520.0	548.8	568.5	584.1	587.1	590.2	587.1	584.1	568.5	548.8	520.0
42.5°	503.1	532.5	552.2	567.7	570.7	573.8	570.7	567.7	552.2	532.5	503.1
45°	474.9	505.2	526.5	542.8	544.3	545.8	544.3	542.8	526.5	505.2	474.9
47.5°	448.8	479.2	499.0	514.1	515.6	517.2	515.6	514.1	499.0	479.2	448.8
50°	429.1	460.1	479.9	495.0	496.5	498.0	496.5	495.0	479.9	460.1	429.1
52.5°	410.3	442.6	459.8	473.2	474.7	476.2	474.7	473.2	459.8	442.6	410.3
55°	376.8	410.9	427.5	440.1	440.1	440.1	440.1	427.5	410.9	376.8	
57.5°	342.0	377.1	391.6	403.0	404.8	406.6	404.8	403.0	391.6	377.1	342.0
60°	318.4	354.0	366.1	376.0	379.0	382.1	379.0	376.0	366.1	354.0	318.4
62.5°	295.0	329.5	341.6	351.1	353.0	354.8	353.0	351.1	341.6	329.5	295.0
65°	258.9	289.2	301.3	310.8	312.3	313.8	312.3	310.8	301.3	289.2	258.9
67.5°	225.7	250.5	259.0	265.7	266.9	268.1	266.9	265.7	259.0	250.5	225.7
70°	203.5	224.8	230.8	235.4	235.4	235.4	235.4	235.4	230.8	224.8	203.5
72.5°	177.2	194.7	200.8	205.7	206.9	208.1	206.9	205.7	200.8	194.7	177.2
75°	139.5	152.4	156.9	160.7	162.2	163.7	162.2	160.7	156.9	152.4	139.5
77.5°	102.0	110.5	113.3	115.7	117.2	118.7	117.2	115.7	113.3	110.5	102.0
80°	76.6	82.6	84.1	85.7	87.2	88.7	87.2	85.7	84.1	82.6	76.6
82.5°	53.8	58.1	59.6	60.8	61.1	61.4	61.1	60.8	59.6	58.1	53.8
85°	25.8	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	25.8
87.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1435715

CATALOG NUMBER: SQ2W-FA-0U-050D-L830-UNV-STD-W-WM-4

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
0°	880.1	880.1	880.1	880.1
2.5°	870.1	874.7	874.7	874.7
5°	838.0	857.4	861.9	866.5
7.5°	774.6	817.6	838.0	858.3
10°	730.0	771.0	811.9	852.8
12.5°	691.8	728.8	786.7	844.6
15°	660.7	691.7	756.9	822.1
17.5°	637.7	657.7	725.9	794.1
20°	632.2	641.3	709.5	777.8
22.5°	622.2	621.9	688.9	755.9
25°	604.9	594.7	653.8	713.0
27.5°	584.0	567.0	613.7	660.4
30°	568.5	548.8	588.3	627.7
32.5°	550.4	529.7	558.2	586.7
35°	525.3	501.1	513.2	525.3
37.5°	501.2	471.8	467.9	463.9
40°	482.1	450.3	436.6	423.0
42.5°	463.9	430.9	416.0	401.2
45°	435.5	403.7	394.6	385.5
47.5°	407.5	374.9	368.3	361.6
50°	386.6	352.5	343.4	334.3
52.5°	363.0	326.1	320.7	315.2
55°	325.2	287.7	292.2	296.8
57.5°	286.5	245.9	249.9	253.8
60°	259.3	216.8	224.4	232.0
62.5°	238.3	197.1	202.3	207.4
65°	210.4	173.2	170.2	167.2
67.5°	184.4	151.0	141.0	131.0
70°	167.2	136.5	122.8	109.2
72.5°	148.0	122.8	109.2	95.5
75°	118.3	98.9	85.3	71.6
77.5°	87.8	74.3	63.1	51.9
80°	66.0	56.1	48.5	40.9
82.5°	46.8	40.0	33.7	27.3
85°	22.7	19.7	16.7	13.6
87.5°	5.5	5.2	3.9	2.7
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P1435715  
 CATALOG NUMBER: SQ2W-FA-0U-050D-L830-UNV-STD-W-WM-4

**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	19.43	21.04	19.79	21.35	21.66	20.63	22.24	20.99	22.55	22.86
	3H	20.57	22.02	20.95	22.35	22.71	21.92	23.37	22.30	23.70	24.06
	4H	20.96	22.32	21.35	22.67	23.04	22.35	23.71	22.75	24.06	24.43
	6H	21.15	22.41	21.57	22.78	23.17	22.54	23.80	22.96	24.17	24.56
	8H	21.21	22.41	21.63	22.80	23.20	22.59	23.79	23.01	24.18	24.58
	12H	21.23	22.38	21.66	22.76	23.19	22.60	23.75	23.03	24.13	24.56
4H	2H	20.38	21.74	20.78	22.09	22.47	21.30	22.66	21.70	23.01	23.38
	3H	21.84	22.97	22.25	23.37	23.77	22.83	23.96	23.24	24.36	24.76
	4H	22.32	23.35	22.75	23.76	24.20	23.33	24.36	23.76	24.77	25.21
	6H	22.59	23.49	23.05	23.93	24.38	23.60	24.49	24.05	24.93	25.39
	8H	22.67	23.50	23.13	23.94	24.41	23.66	24.50	24.12	24.94	25.40
	12H	22.70	23.45	23.18	23.93	24.40	23.68	24.43	24.17	24.91	25.38
8H	4H	22.76	23.60	23.22	24.04	24.51	23.59	24.42	24.05	24.86	25.33
	6H	23.15	23.84	23.64	24.32	24.80	23.93	24.62	24.43	25.11	25.59
	8H	23.27	23.89	23.78	24.40	24.88	24.03	24.65	24.54	25.16	25.65
	12H	23.34	23.89	23.85	24.38	24.94	24.08	24.63	24.59	25.12	25.68
12H	4H	22.80	23.55	23.28	24.03	24.50	23.59	24.34	24.07	24.81	25.28
	6H	23.22	23.84	23.73	24.35	24.83	23.95	24.58	24.47	25.08	25.57
	8H	23.40	23.95	23.91	24.44	25.00	24.10	24.65	24.61	25.14	25.70