

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: P845678

Luminaire Tested: SQ2R-WBN-075D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845678
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-WBN-075D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, NARROW 35-DEGREE OPTIC
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

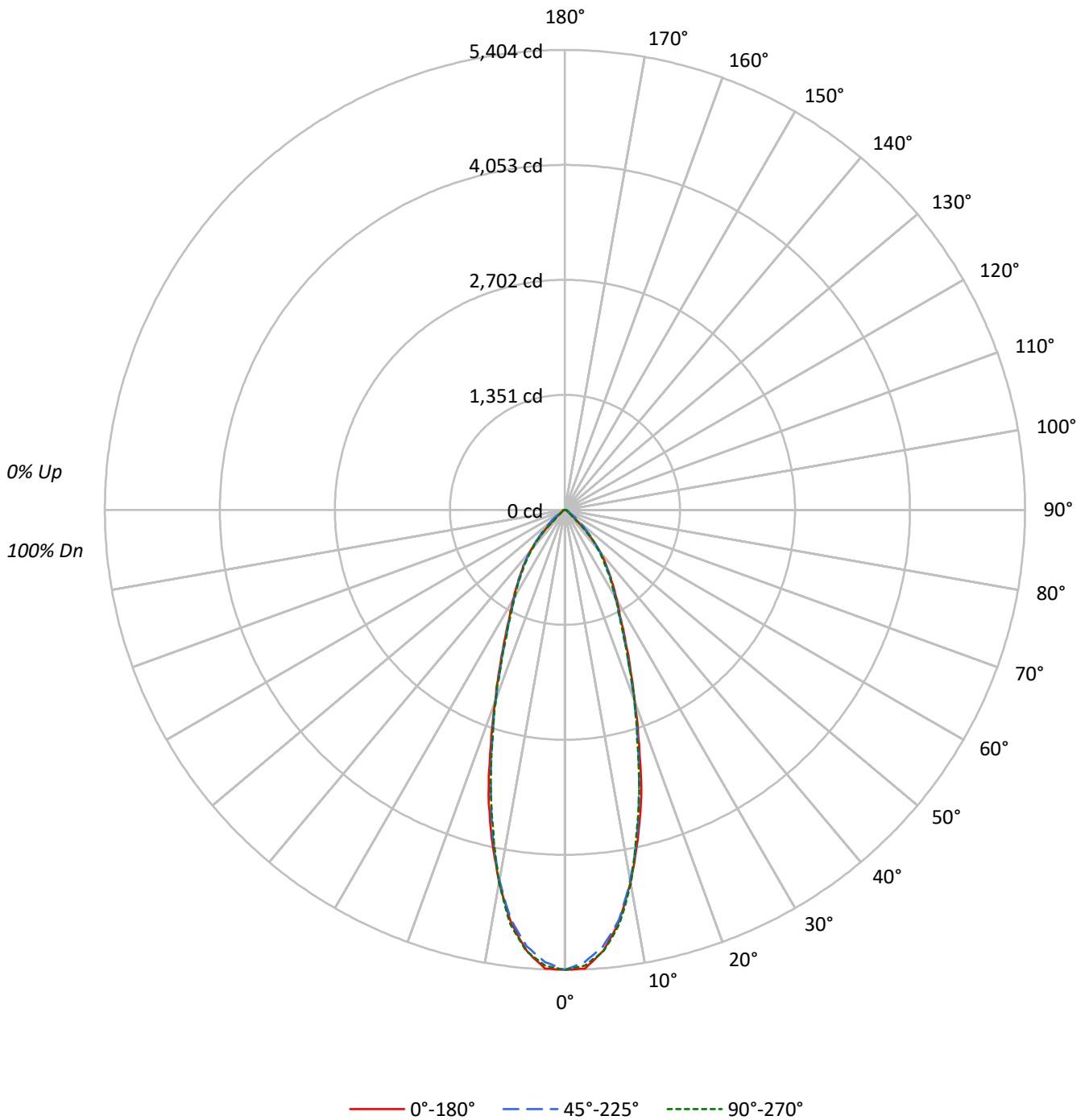
Lumens per Lamp: N/A
Luminaire Lumens: 3136.1 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.3
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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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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81
4	97	90	84	80	95	89	83	79	86	82	78	84	81	78	83	79	77	75
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67	66
7	84	75	69	65	82	74	68	64	73	68	64	72	67	64	70	66	63	62
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58
9	76	67	61	57	75	66	61	57	66	61	57	65	60	57	64	60	57	55
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	87257	87257	87257
5°	84250	83410	84344
10°	72823	72477	72995
15°	57949	56122	56346
20°	41166	40622	40919
25°	29616	29035	28830
30°	22628	22022	21968
35°	17763	17461	17008
40°	13458	13276	12629
45°	7531	8996	6720
50°	2650	5539	2336
55°	1619	3023	1537
60°	1237	1579	1146
65°	1135	1173	1062
70°	1086	1086	996
75°	1017	1017	954
80°	893	893	893
85°	889	704	704

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8996 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	472.1	15.1
10°-20°	933.9	29.8
20°-30°	768.3	24.5
30°-40°	555.0	17.7
40°-50°	282.1	9.0
50°-60°	72.3	2.3
60°-70°	30.4	1.0
70°-80°	16.9	0.5
80°-90°	5.0	0.2
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°	2174.2	69.3
0°-40°	2729.3	87.0
0°-60°	3083.8	98.3
0°-90°	3136.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3136.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5404	5404	5404	5404	5404	
5°	5198	5190	5146	5221	5204	472
15°	3467	3426	3358	3381	3371	944
25°	1662	1660	1630	1616	1618	778
35°	901	907	886	872	863	565
45°	330	381	394	368	294	261
55°	58	67	107	62	55	56
65°	30	31	31	29	28	30
75°	16	16	16	15	15	17
85°	5	5	4	5	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5404.3	5404.3	5404.3	5404.3	5404.3
2.5°	5393.8	5382.3	5318.1	5371.7	5358.3
5°	5198.2	5190.5	5146.4	5221.2	5204.0
7.5°	4877.0	4880.9	4857.9	4916.4	4909.6
10°	4441.8	4459.0	4420.7	4517.5	4452.3
12.5°	3961.5	3943.2	3920.2	3915.4	3886.7
15°	3466.8	3426.5	3357.5	3381.4	3370.9
17.5°	2891.5	2909.7	2842.6	2835.0	2820.6
20°	2395.9	2400.7	2364.2	2383.4	2381.5
22.5°	1997.0	1997.0	1948.1	1978.8	1957.7
25°	1662.4	1659.6	1629.8	1615.5	1618.3
27.5°	1400.7	1388.2	1366.2	1376.7	1370.0
30°	1213.7	1204.2	1181.2	1186.9	1178.3
32.5°	1046.0	1048.8	1024.9	1020.1	1014.3
35°	901.2	907.0	885.9	871.5	862.9
37.5°	767.9	773.7	754.5	734.4	726.7
40°	638.5	642.3	629.9	605.0	599.2
42.5°	497.6	516.8	504.3	481.3	466.9
45°	329.8	380.6	394.0	368.2	294.3
47.5°	182.2	257.9	296.2	230.1	147.6
50°	105.5	154.4	220.5	125.6	93.0
52.5°	74.8	94.0	164.9	84.4	70.0
55°	57.5	67.1	107.4	62.3	54.6
57.5°	46.0	51.8	68.1	48.9	44.1
60°	38.3	42.2	48.9	40.3	35.5
62.5°	33.6	35.5	37.4	32.6	31.6
65°	29.7	30.7	30.7	28.8	27.8
67.5°	25.9	26.8	26.8	25.9	24.9
70°	23.0	24.0	23.0	22.1	21.1
72.5°	19.2	20.1	19.2	19.2	18.2
75°	16.3	16.3	16.3	15.3	15.3
77.5°	13.4	13.4	12.5	12.5	11.5
80°	9.6	10.5	9.6	9.6	9.6
82.5°	7.7	7.7	6.7	6.7	6.7
85°	4.8	4.8	3.8	4.8	3.8
87.5°	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0



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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	6.74	7.80	7.10	8.11	8.42	6.35	7.41	6.72	7.72	8.04
	3H	7.79	8.72	8.17	9.06	9.42	7.36	8.29	7.74	8.63	8.99
	4H	8.23	9.09	8.63	9.44	9.83	7.79	8.65	8.20	9.01	9.40
	6H	8.55	9.34	8.97	9.71	10.11	8.13	8.92	8.55	9.29	9.69
	8H	8.65	9.39	9.09	9.79	10.20	8.24	8.98	8.67	9.37	9.78
	12H	8.72	9.43	9.16	9.81	10.25	8.29	9.00	8.73	9.38	9.81
4H	2H	6.98	7.84	7.38	8.19	8.58	6.65	7.51	7.06	7.86	8.25
	3H	8.28	8.98	8.70	9.39	9.80	7.90	8.60	8.32	9.01	9.42
	4H	8.84	9.47	9.28	9.89	10.34	8.45	9.08	8.89	9.50	9.95
	6H	9.30	9.83	9.77	10.28	10.76	8.92	9.45	9.39	9.90	10.38
	8H	9.45	9.95	9.93	10.40	10.87	9.07	9.57	9.54	10.02	10.49
	12H	9.57	10.00	10.06	10.48	10.96	9.16	9.59	9.65	10.08	10.56
8H	4H	8.98	9.48	9.46	9.93	10.41	8.64	9.13	9.11	9.58	10.06
	6H	9.57	9.96	10.07	10.47	10.95	9.22	9.62	9.73	10.12	10.60
	8H	9.80	10.15	10.33	10.67	11.17	9.45	9.80	9.98	10.32	10.82
	12H	10.00	10.31	10.52	10.81	11.38	9.63	9.94	10.15	10.43	11.01
12H	4H	8.97	9.40	9.46	9.89	10.37	8.63	9.06	9.12	9.55	10.03
	6H	9.58	9.93	10.11	10.45	10.95	9.24	9.59	9.77	10.12	10.61
	8H	9.86	10.17	10.38	10.67	11.24	9.52	9.83	10.04	10.33	10.91