

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: P845677

Luminaire Tested: SQ2R-WBN-075D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845677
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-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, NARROW 35-DEGREE OPTIC
750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

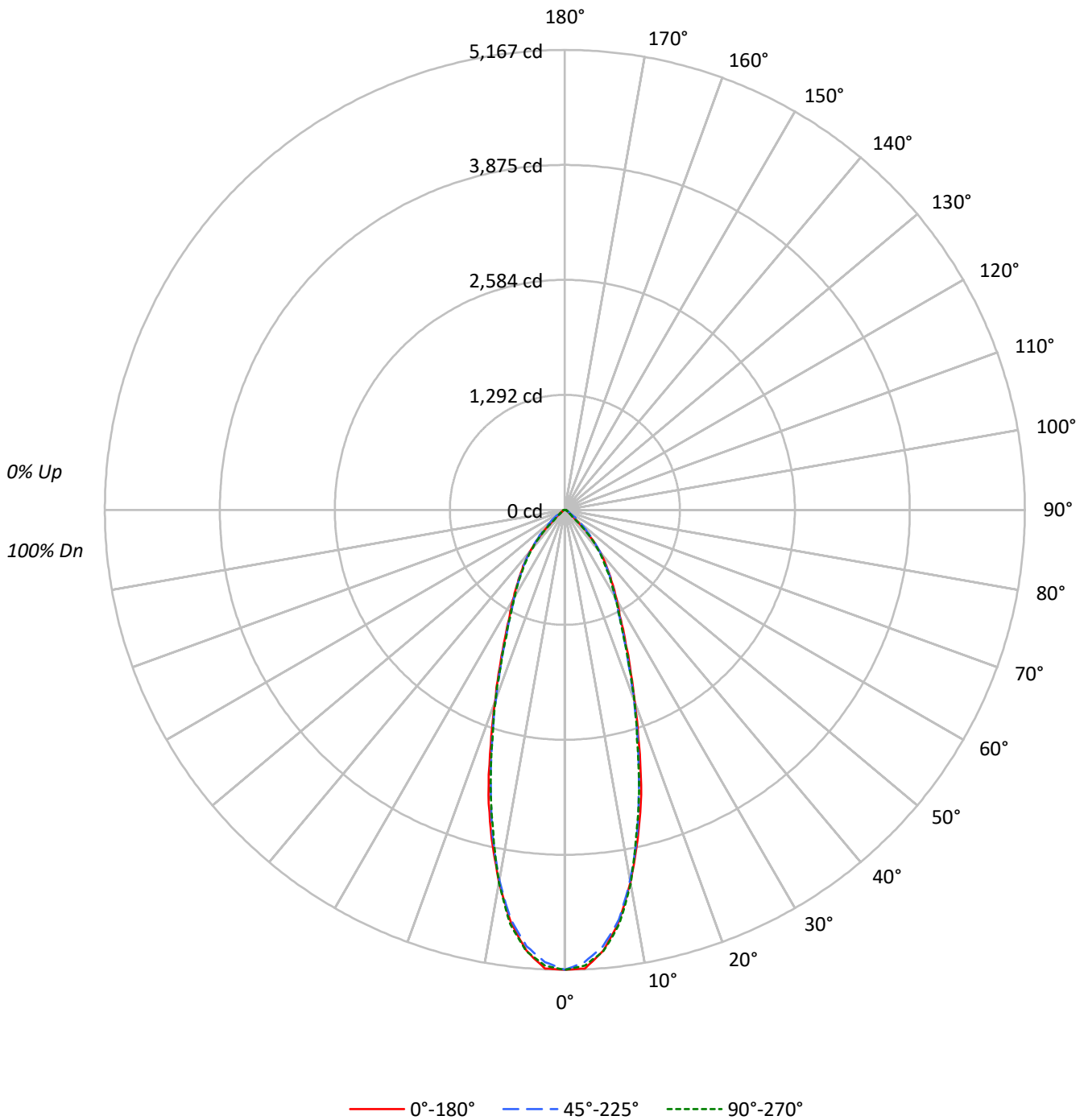
Lumens per Lamp: N/A
Luminaire Lumens: 2998.6 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	83432	83432	83432
5°	80556	79754	80645
10°	69631	69300	69795
15°	55408	53661	53875
20°	39361	38842	39125
25°	28319	27763	27567
30°	21636	21056	21004
35°	16984	16695	16261
40°	12867	12695	12075
45°	7199	8604	6425
50°	2532	5295	2233
55°	1548	2891	1472
60°	1185	1511	1095
65°	1085	1119	1016
70°	1039	1039	954
75°	973	973	917
80°	855	855	855
85°	852	685	685

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8604 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	451.4	15.1
10°-20°	892.9	29.8
20°-30°	734.6	24.5
30°-40°	530.7	17.7
40°-50°	269.8	9.0
50°-60°	69.2	2.3
60°-70°	29.1	1.0
70°-80°	16.2	0.5
80°-90°	4.8	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°	2078.9	69.3
0°-40°	2609.6	87.0
0°-60°	2948.6	98.3
0°-90°	2998.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2998.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5167	5167	5167	5167	5167	
5°	4970	4963	4921	4992	4976	451
15°	3315	3276	3210	3233	3223	902
25°	1590	1587	1558	1545	1547	744
35°	862	867	847	833	825	540
45°	315	364	377	352	281	250
55°	55	64	103	60	52	53
65°	28	29	29	28	27	28
75°	16	16	16	15	15	16
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°	5167.4	5167.4	5167.4	5167.4	5167.4
2.5°	5157.3	5146.3	5084.9	5136.3	5123.4
5°	4970.3	4963.0	4920.8	4992.3	4975.8
7.5°	4663.2	4666.9	4644.9	4700.8	4694.4
10°	4247.1	4263.6	4226.9	4319.5	4257.1
12.5°	3787.8	3770.4	3748.4	3743.8	3716.3
15°	3314.8	3276.3	3210.3	3233.2	3223.1
17.5°	2764.8	2782.2	2718.0	2710.7	2696.9
20°	2290.8	2295.4	2260.6	2278.9	2277.1
22.5°	1909.5	1909.5	1862.7	1892.1	1871.9
25°	1589.6	1586.8	1558.4	1544.6	1547.4
27.5°	1339.3	1327.4	1306.3	1316.4	1310.0
30°	1160.5	1151.4	1129.4	1134.9	1126.6
32.5°	1000.1	1002.9	979.9	975.4	969.9
35°	861.7	867.2	847.0	833.3	825.0
37.5°	734.3	739.8	721.4	702.2	694.9
40°	610.5	614.2	602.3	578.4	572.9
42.5°	475.8	494.1	482.2	460.2	446.4
45°	315.3	363.9	376.8	352.0	281.4
47.5°	174.2	246.6	283.3	220.0	141.2
50°	100.8	147.6	210.8	120.1	88.9
52.5°	71.5	89.8	157.7	80.7	66.9
55°	55.0	64.2	102.7	59.6	52.3
57.5°	44.0	49.5	65.1	46.8	42.2
60°	36.7	40.3	46.8	38.5	33.9
62.5°	32.1	33.9	35.8	31.2	30.3
65°	28.4	29.3	29.3	27.5	26.6
67.5°	24.8	25.7	25.7	24.8	23.8
70°	22.0	22.9	22.0	21.1	20.2
72.5°	18.3	19.3	18.3	18.3	17.4
75°	15.6	15.6	15.6	14.7	14.7
77.5°	12.8	12.8	11.9	11.9	11.0
80°	9.2	10.1	9.2	9.2	9.2
82.5°	7.3	7.3	6.4	6.4	6.4
85°	4.6	4.6	3.7	4.6	3.7
87.5°	1.8	1.8	1.8	1.8	1.8
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	6.58	7.64	6.95	7.95	8.27	6.20	7.26	6.56	7.57	7.88
	3H	7.64	8.57	8.02	8.90	9.27	7.21	8.14	7.59	8.47	8.84
	4H	8.07	8.93	8.48	9.29	9.68	7.64	8.50	8.05	8.86	9.24
	6H	8.39	9.18	8.81	9.56	9.95	7.98	8.77	8.40	9.14	9.54
	8H	8.50	9.24	8.93	9.63	10.04	8.09	8.83	8.52	9.22	9.63
	12H	8.57	9.28	9.01	9.66	10.09	8.14	8.85	8.58	9.24	9.67
4H	2H	6.82	7.68	7.23	8.04	8.42	6.49	7.35	6.90	7.71	8.10
	3H	8.12	8.82	8.54	9.23	9.64	7.75	8.45	8.16	8.85	9.26
	4H	8.68	9.31	9.12	9.73	10.18	8.30	8.93	8.74	9.35	9.80
	6H	9.15	9.68	9.61	10.13	10.60	8.77	9.30	9.24	9.75	10.23
	8H	9.30	9.80	9.77	10.25	10.72	8.92	9.42	9.40	9.87	10.34
	12H	9.41	9.84	9.90	10.33	10.81	9.02	9.45	9.51	9.94	10.41
8H	4H	8.83	9.33	9.30	9.78	10.25	8.48	8.98	8.96	9.43	9.91
	6H	9.41	9.81	9.92	10.31	10.80	9.07	9.47	9.58	9.97	10.45
	8H	9.65	10.00	10.18	10.52	11.02	9.30	9.66	9.83	10.18	10.67
	12H	9.85	10.16	10.37	10.66	11.24	9.48	9.79	10.00	10.29	10.87
12H	4H	8.81	9.25	9.30	9.73	10.21	8.48	8.91	8.97	9.40	9.88
	6H	9.42	9.78	9.96	10.30	10.80	9.09	9.45	9.62	9.97	10.46
	8H	9.71	10.02	10.23	10.52	11.10	9.38	9.69	9.90	10.18	10.76