

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: P845452

Luminaire Tested: SQ2R-BBM-100D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845452
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P559649)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-BBM-100D-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, WIDE 80-DEGREE OPTIC
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

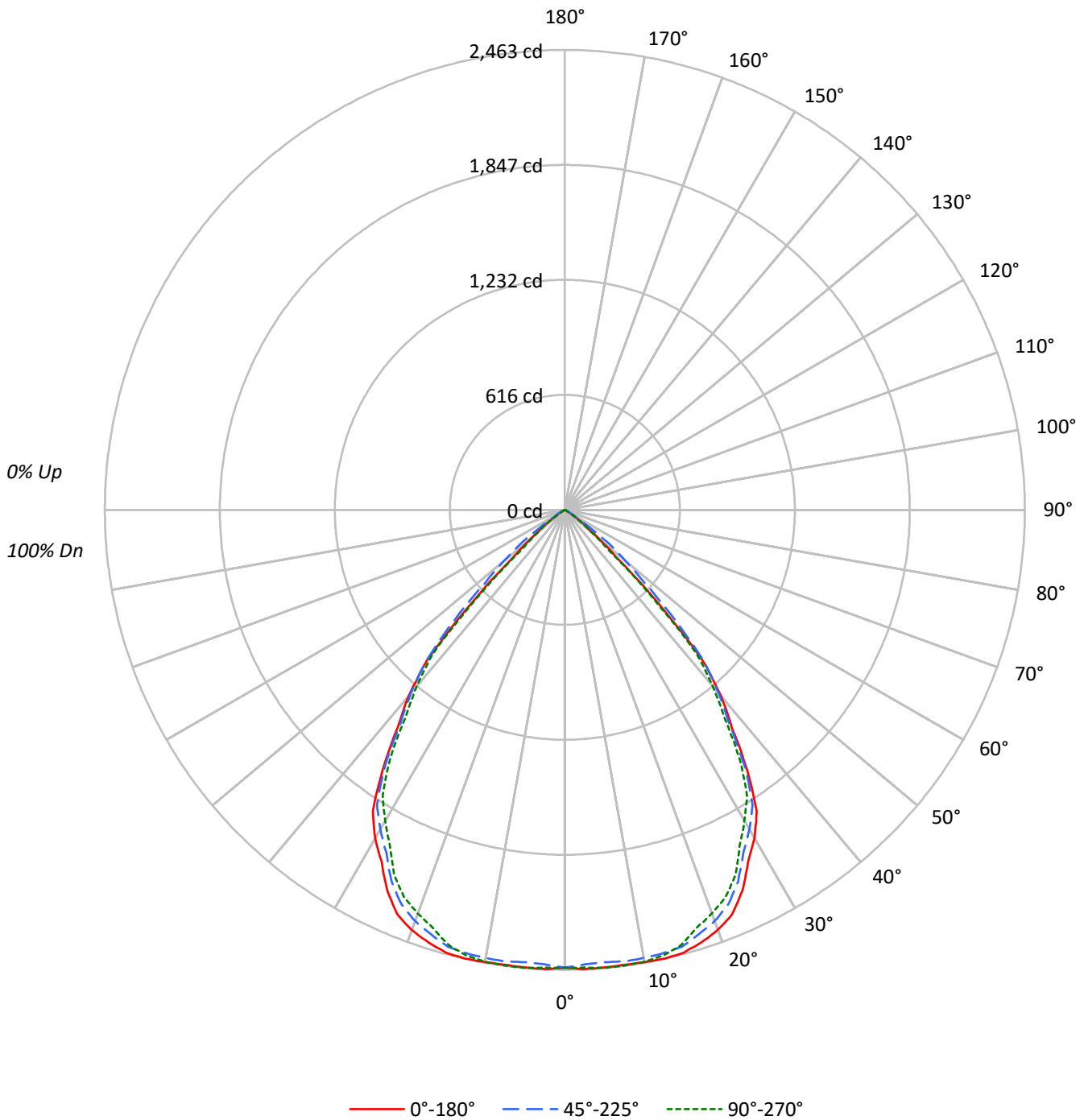
Lumens per Lamp: N/A
Luminaire Lumens: 3660.2 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92		
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84		
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76		
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70		
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63		
6	83	73	66	61	81	72	65	61	70	65	60	69	64	60	67	63	60	58		
7	78	67	61	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53		
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49		
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45		
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39585	39585	39585
5°	39854	39412	39913
10°	40315	39956	40286
15°	41043	40493	40311
20°	41154	40278	39526
25°	40073	39099	38482
30°	37858	36838	35854
35°	33557	33163	32229
40°	27394	27008	25933
45°	16150	19064	15025
50°	5448	10623	4853
55°	1847	3797	1951
60°	178	1117	58
65°	0	69	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 19064 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.3	6.4
10°-20°	685.7	18.7
20°-30°	1009.1	27.6
30°-40°	1031.0	28.2
40°-50°	592.7	16.2
50°-60°	103.7	2.8
60°-70°	3.8	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1929.1	52.7
0°-40°	2960.1	80.9
0°-60°	3656.5	99.9
0°-90°	3660.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3660.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2452	2452	2452	2452	2452	
5°	2459	2454	2432	2466	2463	235
15°	2455	2477	2422	2424	2412	692
25°	2249	2269	2195	2171	2160	1028
35°	1702	1712	1682	1655	1635	1050
45°	707	823	835	792	658	553
55°	66	78	135	76	69	75
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2451.7	2451.7	2451.7	2451.7	2451.7
2.5°	2461.9	2456.3	2437.1	2458.8	2453.2
5°	2459.0	2453.7	2431.7	2466.3	2462.6
7.5°	2457.5	2453.3	2438.6	2468.7	2461.5
10°	2459.0	2459.0	2437.1	2464.3	2457.2
12.5°	2461.9	2469.0	2432.7	2454.1	2444.1
15°	2455.4	2476.7	2422.5	2424.0	2411.6
17.5°	2428.7	2457.5	2383.5	2366.0	2347.1
20°	2395.2	2425.5	2344.2	2316.5	2300.4
22.5°	2344.2	2373.0	2287.3	2264.0	2246.5
25°	2249.4	2269.1	2194.7	2170.8	2160.1
27.5°	2125.4	2135.4	2070.7	2045.9	2028.1
30°	2030.6	2030.6	1975.9	1948.1	1923.1
32.5°	1912.5	1906.9	1871.0	1838.7	1815.2
35°	1702.5	1711.5	1682.5	1654.8	1635.1
37.5°	1470.3	1478.9	1449.1	1417.4	1403.9
40°	1299.7	1306.8	1281.4	1248.3	1230.4
42.5°	1089.7	1128.1	1105.0	1068.7	1045.2
45°	707.3	823.2	834.9	791.7	658.0
47.5°	368.6	489.8	578.9	442.2	309.9
50°	216.9	295.3	422.9	241.3	193.2
52.5°	139.6	173.9	297.5	154.4	130.5
55°	65.6	78.0	134.9	76.4	69.3
57.5°	24.4	36.5	60.9	37.0	26.6
60°	5.5	16.2	34.6	10.8	1.8
62.5°	1.1	4.7	20.1	2.2	0.4
65°	0.0	0.0	1.8	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	4.81	5.94	5.18	6.25	6.57	4.41	5.54	4.78	5.85	6.17
	3H	4.64	5.63	5.03	5.97	6.33	4.24	5.23	4.62	5.56	5.93
	4H	4.55	5.47	4.96	5.82	6.21	4.15	5.07	4.56	5.42	5.81
	6H	4.46	5.29	4.88	5.67	6.06	4.06	4.89	4.47	5.27	5.66
	8H	4.41	5.19	4.84	5.58	5.99	4.00	4.79	4.44	5.18	5.59
	12H	4.35	5.10	4.79	5.49	5.92	3.95	4.70	4.39	5.09	5.52
4H	2H	4.56	5.48	4.97	5.83	6.22	4.16	5.08	4.57	5.43	5.82
	3H	4.39	5.12	4.80	5.53	5.94	3.99	4.72	4.40	5.13	5.54
	4H	4.28	4.93	4.72	5.35	5.80	3.88	4.53	4.32	4.95	5.40
	6H	4.18	4.74	4.65	5.19	5.66	3.78	4.34	4.25	4.79	5.26
	8H	4.11	4.63	4.59	5.08	5.56	3.71	4.23	4.19	4.68	5.16
	12H	4.05	4.51	4.54	4.99	5.47	3.65	4.10	4.14	4.59	5.07
8H	4H	4.11	4.63	4.59	5.08	5.56	3.71	4.23	4.19	4.68	5.16
	6H	3.99	4.41	4.50	4.91	5.40	3.59	4.01	4.10	4.51	5.00
	8H	3.92	4.29	4.44	4.81	5.31	3.51	3.89	4.04	4.41	4.91
	12H	3.86	4.19	4.38	4.69	5.27	3.46	3.79	3.98	4.29	4.87
12H	4H	4.05	4.51	4.54	4.99	5.47	3.65	4.10	4.14	4.59	5.07
	6H	3.92	4.29	4.45	4.81	5.31	3.52	3.89	4.04	4.41	4.91
	8H	3.86	4.19	4.38	4.69	5.27	3.46	3.79	3.98	4.29	4.87