

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: P845447

Luminaire Tested: SQ2R-BBM-050D-940-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P845447  
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-050D-940-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, WIDE 80-DEGREE OPTIC  
500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

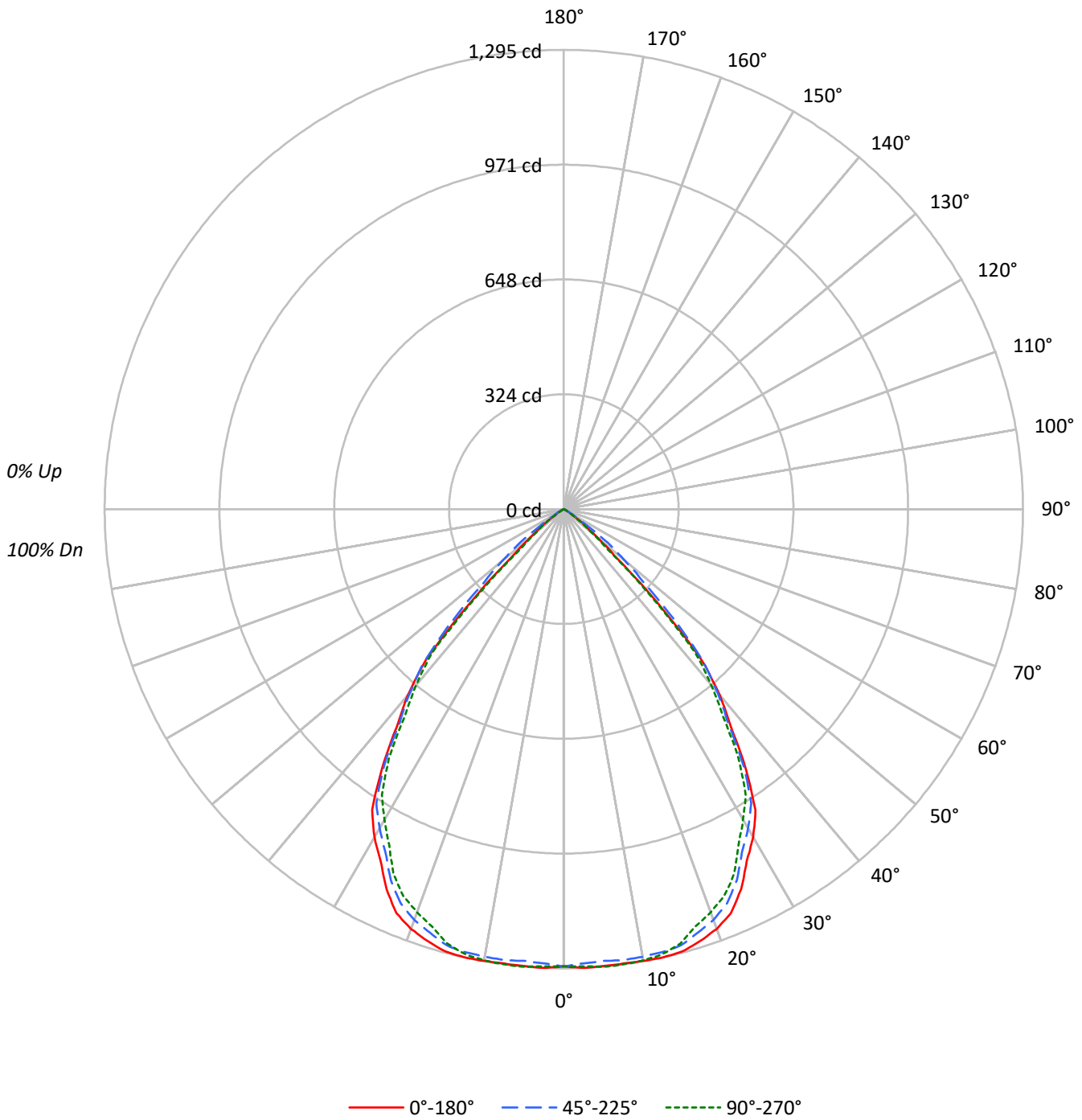
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1925.1 lumens  
Efficiency: N/A  
Efficacy: 116.0 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): 16.6  
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92				92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84				84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76				76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				70
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63				63
6	83	73	66	61	81	72	65	61	70	65	60	69	64	60	67	63	60	58				58
7	78	67	61	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53				53
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49				49
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42				42

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

	0°	45°	90°
0°	20818	20818	20818
5°	20961	20728	20992
10°	21204	21015	21187
15°	21586	21297	21202
20°	21644	21184	20789
25°	21075	20564	20240
30°	19911	19374	18856
35°	17649	17442	16949
40°	14406	14206	13639
45°	8494	10026	7903
50°	2866	5586	2552
55°	971	1996	1025
60°	94	588	32
65°	0	38	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: 10026 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.2	6.4
10°-20°	360.7	18.7
20°-30°	530.7	27.6
30°-40°	542.2	28.2
40°-50°	311.7	16.2
50°-60°	54.5	2.8
60°-70°	2.0	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°	1014.6	52.7
0°-40°	1556.8	80.9
0°-60°	1923.1	99.9
0°-90°	1925.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1925.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1289	1289	1289	1289	1289	
5°	1293	1290	1279	1297	1295	123
15°	1291	1303	1274	1275	1268	364
25°	1183	1193	1154	1142	1136	541
35°	895	900	885	870	860	552
45°	372	433	439	416	346	291
55°	34	41	71	40	36	39
65°	0	0	1	0	0	0
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°	1289.4	1289.4	1289.4	1289.4	1289.4
2.5°	1294.8	1291.8	1281.8	1293.2	1290.2
5°	1293.3	1290.5	1278.9	1297.1	1295.2
7.5°	1292.5	1290.3	1282.5	1298.4	1294.6
10°	1293.3	1293.3	1281.8	1296.1	1292.3
12.5°	1294.8	1298.6	1279.5	1290.7	1285.4
15°	1291.4	1302.6	1274.1	1274.9	1268.4
17.5°	1277.4	1292.5	1253.6	1244.4	1234.4
20°	1259.7	1275.6	1232.9	1218.3	1209.9
22.5°	1232.9	1248.0	1203.0	1190.7	1181.5
25°	1183.0	1193.4	1154.3	1141.7	1136.1
27.5°	1117.8	1123.1	1089.1	1076.0	1066.6
30°	1068.0	1068.0	1039.2	1024.6	1011.4
32.5°	1005.9	1002.9	984.0	967.0	954.7
35°	895.4	900.1	884.9	870.3	859.9
37.5°	773.3	777.8	762.2	745.5	738.4
40°	683.5	687.3	674.0	656.5	647.1
42.5°	573.1	593.3	581.2	562.1	549.7
45°	372.0	432.9	439.1	416.4	346.1
47.5°	193.8	257.6	304.5	232.6	163.0
50°	114.1	155.3	222.4	126.9	101.6
52.5°	73.4	91.5	156.5	81.2	68.6
55°	34.5	41.0	70.9	40.2	36.4
57.5°	12.8	19.2	32.0	19.5	14.0
60°	2.9	8.5	18.2	5.7	1.0
62.5°	0.6	2.5	10.5	1.2	0.2
65°	0.0	0.0	1.0	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	2.57	3.71	2.94	4.02	4.33	2.18	3.31	2.55	3.62	3.94
	3H	2.41	3.40	2.79	3.73	4.10	2.01	3.00	2.40	3.34	3.70
	4H	2.32	3.23	2.72	3.58	3.97	1.92	2.84	2.33	3.19	3.58
	6H	2.22	3.06	2.64	3.43	3.83	1.83	2.66	2.25	3.04	3.43
	8H	2.17	2.96	2.60	3.35	3.76	1.78	2.56	2.21	2.95	3.36
	12H	2.12	2.87	2.55	3.25	3.68	1.72	2.47	2.16	2.86	3.29
4H	2H	2.33	3.24	2.73	3.59	3.98	1.94	2.85	2.34	3.20	3.59
	3H	2.15	2.89	2.57	3.30	3.70	1.76	2.50	2.18	2.90	3.31
	4H	2.04	2.70	2.48	3.12	3.57	1.65	2.30	2.09	2.73	3.17
	6H	1.94	2.50	2.41	2.95	3.42	1.55	2.11	2.02	2.56	3.03
	8H	1.87	2.40	2.35	2.84	3.32	1.48	2.00	1.96	2.45	2.93
	12H	1.81	2.27	2.30	2.76	3.23	1.42	1.88	1.91	2.36	2.84
8H	4H	1.87	2.40	2.35	2.84	3.32	1.48	2.00	1.96	2.45	2.93
	6H	1.75	2.17	2.26	2.67	3.16	1.36	1.78	1.87	2.28	2.77
	8H	1.68	2.06	2.21	2.58	3.07	1.29	1.67	1.82	2.19	2.68
	12H	1.62	1.96	2.14	2.45	3.03	1.23	1.57	1.75	2.06	2.64
12H	4H	1.81	2.27	2.30	2.76	3.23	1.42	1.88	1.91	2.36	2.84
	6H	1.68	2.06	2.21	2.58	3.07	1.29	1.67	1.82	2.19	2.68
	8H	1.62	1.96	2.14	2.45	3.03	1.23	1.57	1.75	2.06	2.64