

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: P845449

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

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845449
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-075D-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - BLACK BAFFLE, WIDE 80-DEGREE OPTIC
750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

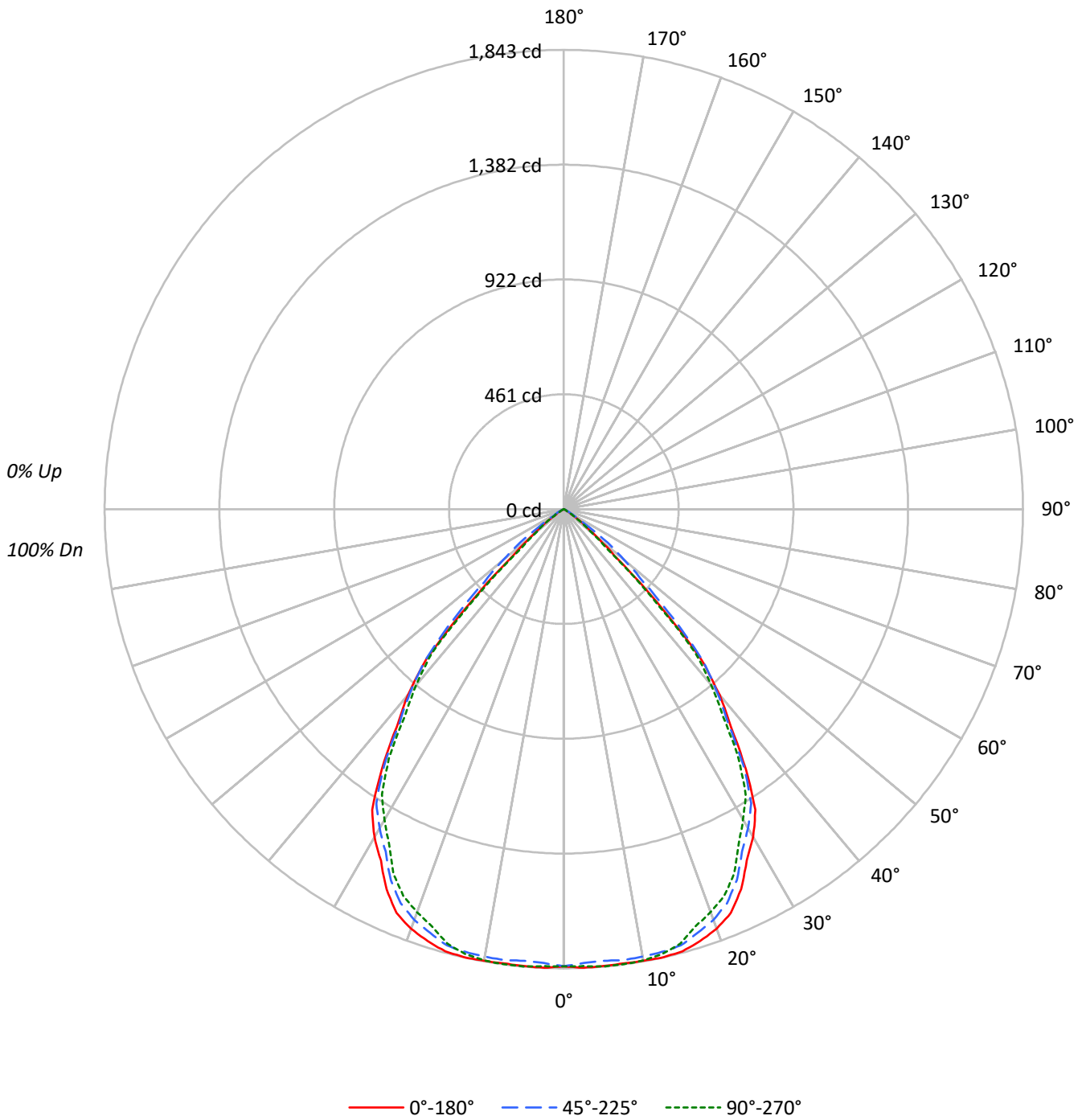
Lumens per Lamp: N/A
Luminaire Lumens: 2739.1 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P845449

CATALOG NUMBER: SQ2R-BBM-075D-935-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P845449

CATALOG NUMBER: SQ2R-BBM-075D-935-UNV-STD-W-4

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				
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°	29623	29623	29623
5°	29825	29493	29869
10°	30170	29901	30147
15°	30713	30303	30166
20°	30797	30141	29579
25°	29988	29259	28798
30°	28331	27568	26830
35°	25113	24817	24118
40°	20499	20213	19408
45°	12086	14266	11243
50°	4077	7950	3632
55°	1382	2840	1458
60°	132	836	45
65°	0	53	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: 14266 cd/sqm

TEST NUMBER: P845449

CATALOG NUMBER: SQ2R-BBM-075D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.3	6.4
10°-20°	513.2	18.7
20°-30°	755.1	27.6
30°-40°	771.5	28.2
40°-50°	443.6	16.2
50°-60°	77.6	2.8
60°-70°	2.8	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°	1443.6	52.7
0°-40°	2215.1	80.9
0°-60°	2736.3	99.9
0°-90°	2739.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2739.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1835	1835	1835	1835	1835	
5°	1840	1836	1820	1846	1843	176
15°	1837	1853	1813	1814	1805	518
25°	1683	1698	1642	1624	1616	769
35°	1274	1281	1259	1238	1224	786
45°	529	616	625	592	492	414
55°	49	58	101	57	52	56
65°	0	0	1	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P845449

CATALOG NUMBER: SQ2R-BBM-075D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1834.7	1834.7	1834.7	1834.7	1834.7
2.5°	1842.3	1838.1	1823.8	1840.0	1835.8
5°	1840.2	1836.2	1819.7	1845.6	1842.9
7.5°	1839.1	1835.9	1824.9	1847.4	1842.1
10°	1840.2	1840.2	1823.8	1844.1	1838.8
12.5°	1842.3	1847.7	1820.5	1836.5	1829.0
15°	1837.4	1853.4	1812.9	1814.0	1804.7
17.5°	1817.5	1839.1	1783.7	1770.6	1756.4
20°	1792.4	1815.1	1754.2	1733.5	1721.5
22.5°	1754.2	1775.8	1711.7	1694.2	1681.1
25°	1683.3	1698.0	1642.4	1624.5	1616.5
27.5°	1590.5	1598.0	1549.6	1531.1	1517.7
30°	1519.6	1519.6	1478.7	1457.8	1439.1
32.5°	1431.2	1427.0	1400.1	1376.0	1358.4
35°	1274.1	1280.7	1259.1	1238.3	1223.6
37.5°	1100.3	1106.7	1084.5	1060.7	1050.6
40°	972.6	977.9	959.0	934.1	920.8
42.5°	815.5	844.2	826.9	799.8	782.2
45°	529.3	616.0	624.8	592.4	492.4
47.5°	275.8	366.5	433.2	330.9	231.9
50°	162.3	221.0	316.5	180.6	144.6
52.5°	104.5	130.1	222.6	115.5	97.7
55°	49.1	58.4	100.9	57.2	51.8
57.5°	18.3	27.3	45.6	27.7	19.9
60°	4.1	12.1	25.9	8.0	1.4
62.5°	0.8	3.5	15.0	1.6	0.3
65°	0.0	0.0	1.4	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



TEST NUMBER: P845449

CATALOG NUMBER: SQ2R-BBM-075D-935-UNV-STD-W-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	3.80	4.94	4.17	5.25	5.56	3.40	4.53	3.76	4.84	5.16
	3H	3.64	4.63	4.02	4.96	5.33	3.23	4.22	3.61	4.55	4.92
	4H	3.55	4.46	3.95	4.81	5.20	3.14	4.06	3.55	4.41	4.80
	6H	3.45	4.29	3.87	4.66	5.05	3.04	3.88	3.46	4.25	4.65
	8H	3.40	4.18	3.83	4.58	4.99	2.99	3.78	3.43	4.17	4.58
	12H	3.35	4.10	3.78	4.48	4.91	2.94	3.69	3.37	4.07	4.51
4H	2H	3.56	4.47	3.96	4.82	5.21	3.15	4.07	3.56	4.42	4.81
	3H	3.38	4.12	3.80	4.52	4.93	2.98	3.71	3.39	4.12	4.52
	4H	3.27	3.92	3.71	4.35	4.79	2.87	3.52	3.31	3.94	4.39
	6H	3.17	3.73	3.64	4.18	4.65	2.77	3.33	3.24	3.77	4.25
	8H	3.10	3.62	3.58	4.07	4.55	2.70	3.22	3.17	3.67	4.14
	12H	3.04	3.50	3.53	3.99	4.46	2.64	3.09	3.13	3.58	4.06
8H	4H	3.10	3.62	3.58	4.07	4.55	2.70	3.22	3.17	3.67	4.14
	6H	2.98	3.40	3.49	3.90	4.39	2.58	3.00	3.09	3.50	3.98
	8H	2.91	3.29	3.44	3.81	4.30	2.50	2.88	3.03	3.40	3.90
	12H	2.85	3.19	3.37	3.68	4.26	2.45	2.78	2.97	3.28	3.86
12H	4H	3.04	3.50	3.53	3.99	4.46	2.64	3.09	3.13	3.58	4.06
	6H	2.91	3.29	3.44	3.81	4.30	2.50	2.88	3.03	3.40	3.90
	8H	2.85	3.19	3.37	3.68	4.26	2.45	2.78	2.97	3.28	3.86