

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: P845666

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

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845666
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P559733)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-WBM-075D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, DISCREET OPTICS - WHITE BAFFLE, WIDE 80-DEGREE OPTIC
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

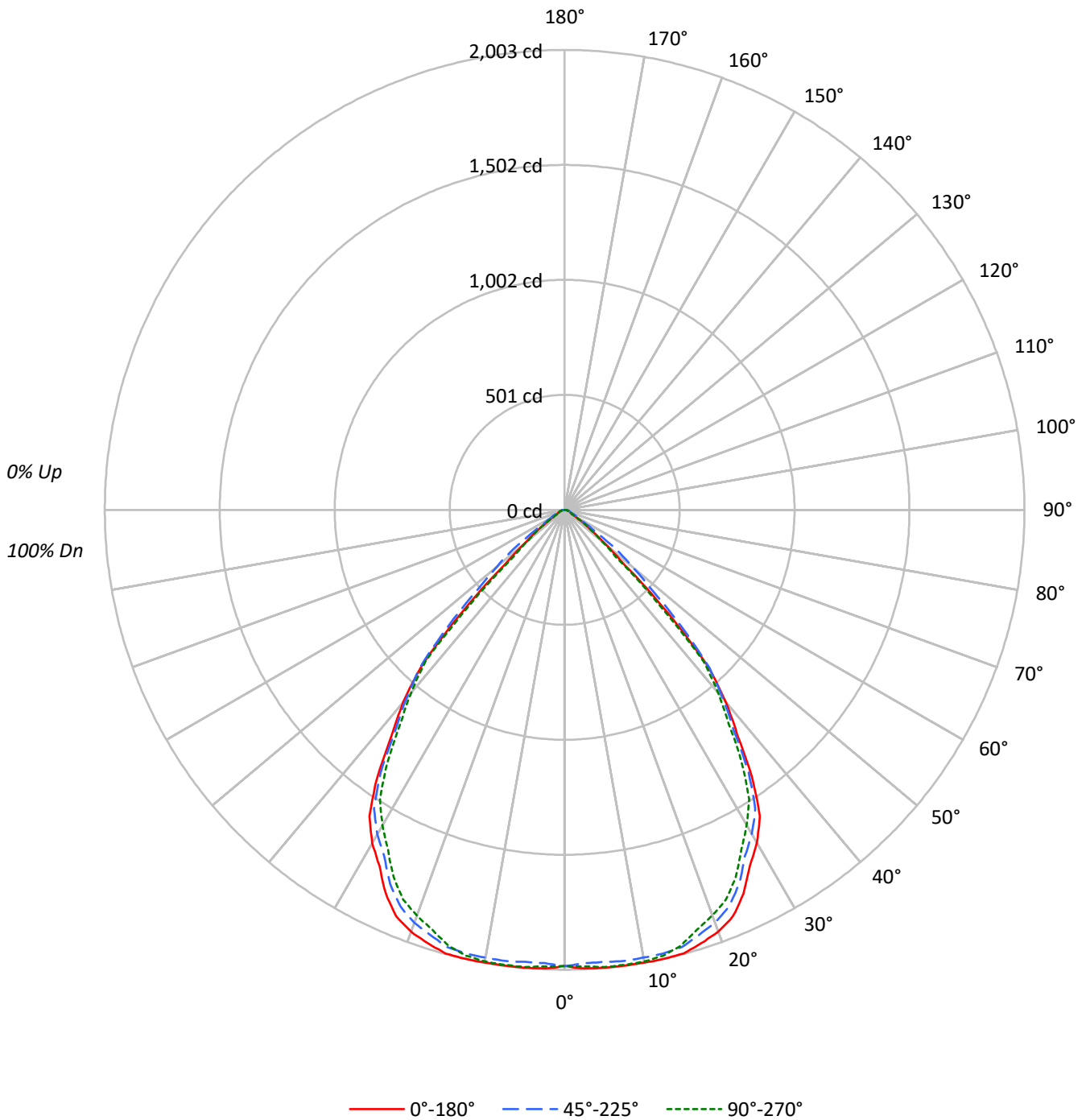
Lumens per Lamp: N/A
Luminaire Lumens: 3128.2 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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: P845666

CATALOG NUMBER: SQ2R-WBM-075D-940-UNV-STD-W-4

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				
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83				
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75				
4	93	84	78	73	91	83	77	72	81	75	71	78	74	70	77	73	70	68				
5	87	77	70	65	85	76	70	65	74	69	65	73	68	64	71	67	63	62				
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56				
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51				
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32090	32090	32090
5°	32444	32028	32399
10°	32819	32468	32749
15°	33437	32961	32817
20°	33612	32876	32311
25°	32840	32028	31417
30°	31230	30404	29580
35°	28068	27532	26548
40°	23067	22584	21922
45°	14595	16388	13161
50°	5662	9640	5197
55°	2730	4377	2773
60°	1292	2167	1198
65°	1146	1253	1089
70°	1147	1147	1076
75°	1067	1154	979
80°	1060	1060	930
85°	1056	1056	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16388 cd/sqm

TEST NUMBER: P845666

CATALOG NUMBER: SQ2R-WBM-075D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.3	6.1
10°-20°	558.4	17.8
20°-30°	826.9	26.4
30°-40°	856.5	27.4
40°-50°	514.8	16.5
50°-60°	123.1	3.9
60°-70°	33.5	1.1
70°-80°	18.7	0.6
80°-90°	6.0	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°	1575.6	50.4
0°-40°	2432.1	77.7
0°-60°	3070.0	98.1
0°-90°	3128.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3128.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1988	1988	1988	1988	1988	
5°	2002	1995	1976	2002	1999	191
15°	2000	2013	1972	1973	1963	564
25°	1843	1860	1798	1775	1764	843
35°	1424	1421	1397	1371	1347	876
45°	639	717	718	680	576	489
55°	97	111	156	104	98	99
65°	30	31	33	30	28	31
75°	17	18	18	17	16	19
85°	6	6	6	6	4	6
90°	0	0	0	0	0	



TEST NUMBER: P845666

CATALOG NUMBER: SQ2R-WBM-075D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1987.5	1987.5	1987.5	1987.5	1987.5
2.5°	1999.0	1992.3	1976.1	1994.3	1989.8
5°	2001.8	1994.8	1976.1	2001.8	1999.0
7.5°	2001.8	1997.4	1981.6	2002.8	1998.7
10°	2001.8	2001.8	1980.4	2001.7	1997.5
12.5°	2003.0	2008.5	1979.3	1994.8	1988.4
15°	2000.4	2012.9	1971.9	1973.0	1963.3
17.5°	1979.0	1998.5	1941.9	1930.5	1917.1
20°	1956.2	1975.7	1913.4	1891.7	1880.5
22.5°	1916.2	1936.9	1870.0	1849.4	1837.2
25°	1843.4	1860.1	1797.8	1774.7	1763.5
27.5°	1747.0	1754.6	1700.5	1678.8	1666.5
30°	1675.1	1673.7	1630.8	1603.3	1586.6
32.5°	1582.6	1584.6	1545.2	1518.7	1496.4
35°	1424.0	1421.1	1396.8	1370.6	1346.9
37.5°	1234.8	1236.8	1210.8	1183.0	1173.7
40°	1094.4	1098.5	1071.5	1041.6	1040.1
42.5°	923.1	954.1	934.6	903.3	897.5
45°	639.2	717.4	717.7	679.7	576.4
47.5°	355.6	453.2	511.7	403.5	301.6
50°	225.4	289.6	383.8	241.7	206.9
52.5°	160.4	192.2	284.5	172.5	151.0
55°	97.0	111.0	155.5	104.0	98.5
57.5°	59.4	71.6	91.0	70.5	58.8
60°	40.0	51.1	67.1	45.5	37.1
62.5°	35.4	38.7	52.2	36.5	33.7
65°	30.0	31.4	32.8	30.0	28.5
67.5°	26.5	28.0	27.7	26.5	25.1
70°	24.3	25.7	24.3	24.3	22.8
72.5°	22.0	22.3	22.0	20.8	20.5
75°	17.1	18.5	18.5	17.1	15.7
77.5°	13.7	14.8	13.7	13.7	12.3
80°	11.4	11.4	11.4	11.4	10.0
82.5°	9.1	9.1	9.1	9.1	7.7
85°	5.7	5.7	5.7	5.7	4.3
87.5°	2.3	2.3	2.3	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P845666

CATALOG NUMBER: SQ2R-WBM-075D-940-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	9.17	10.35	9.53	10.66	10.98	8.77	9.95	9.13	10.26	10.57
	3H	9.71	10.75	10.09	11.08	11.45	9.31	10.35	9.69	10.68	11.04
	4H	9.98	10.94	10.38	11.29	11.68	9.56	10.52	9.97	10.87	11.26
	6H	10.20	11.08	10.62	11.45	11.85	9.77	10.65	10.19	11.02	11.42
	8H	10.29	11.11	10.72	11.51	11.91	9.84	10.66	10.27	11.06	11.46
	12H	10.34	11.13	10.78	11.52	11.95	9.87	10.66	10.30	11.04	11.47
4H	2H	9.23	10.19	9.63	10.54	10.92	8.86	9.82	9.26	10.17	10.56
	3H	9.99	10.76	10.40	11.17	11.57	9.62	10.40	10.04	10.81	11.21
	4H	10.38	11.07	10.81	11.49	11.94	10.00	10.69	10.43	11.11	11.56
	6H	10.73	11.33	11.20	11.77	12.25	10.34	10.93	10.81	11.38	11.85
	8H	10.86	11.42	11.34	11.86	12.34	10.45	11.00	10.92	11.45	11.93
	12H	10.97	11.45	11.46	11.94	12.41	10.52	11.01	11.01	11.49	11.97
8H	4H	10.47	11.03	10.95	11.48	11.95	10.12	10.68	10.60	11.13	11.60
	6H	10.94	11.39	11.44	11.89	12.37	10.58	11.03	11.09	11.53	12.02
	8H	11.14	11.54	11.66	12.06	12.55	10.77	11.18	11.30	11.69	12.19
	12H	11.32	11.68	11.84	12.18	12.75	10.93	11.28	11.45	11.78	12.36
12H	4H	10.46	10.94	10.95	11.43	11.90	10.11	10.60	10.60	11.08	11.56
	6H	10.95	11.35	11.47	11.87	12.36	10.60	11.00	11.13	11.52	12.02
	8H	11.20	11.56	11.72	12.05	12.63	10.85	11.20	11.37	11.70	12.28