

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: P854367

Luminaire Tested: SQ2-WBM-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854367
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBM-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

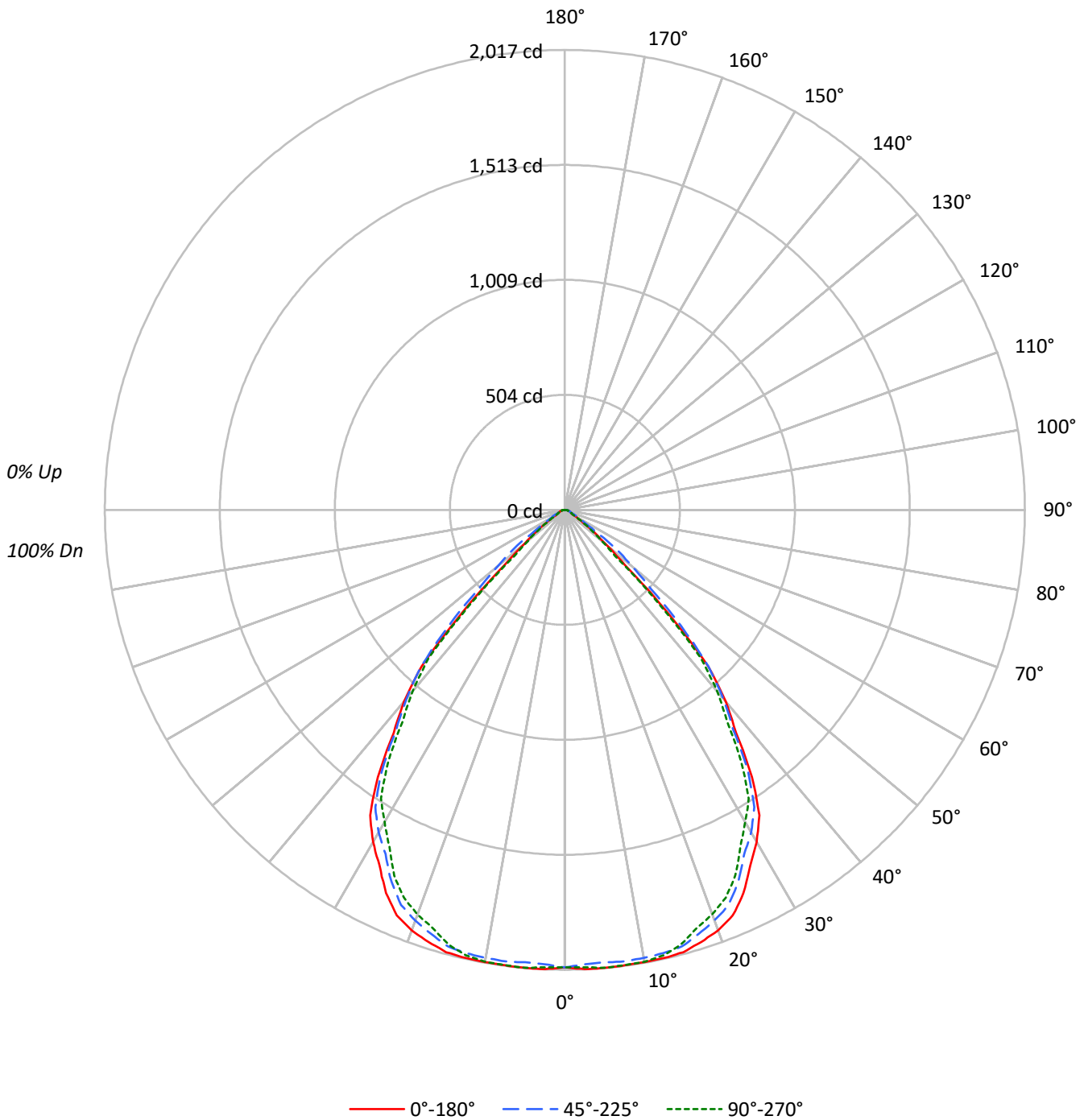
Lumens per Lamp: N/A
Luminaire Lumens: 3138.3 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 27.6
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				
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	79	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°	32393	32393	32393
5°	32689	32284	32673
10°	33019	32705	33003
15°	33568	33135	32973
20°	33728	32936	32440
25°	33034	32058	31527
30°	31344	30447	29479
35°	28190	27602	26597
40°	23111	22765	21893
45°	14451	16449	13572
50°	5654	9590	5169
55°	2790	4467	2761
60°	1305	2144	1179
65°	1177	1249	1104
70°	1133	1180	1090
75°	1142	1142	1023
80°	1069	1069	986
85°	1074	889	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16449 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.8	6.1
10°-20°	560.9	17.9
20°-30°	829.3	26.4
30°-40°	858.1	27.3
40°-50°	516.1	16.4
50°-60°	123.5	3.9
60°-70°	33.8	1.1
70°-80°	18.9	0.6
80°-90°	5.9	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°	1582.0	50.4
0°-40°	2440.1	77.8
0°-60°	3079.8	98.1
0°-90°	3138.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3138.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2006	2006	2006	2006	2006	
5°	2017	2010	1992	2019	2016	192
15°	2008	2023	1982	1982	1973	566
25°	1854	1869	1800	1780	1770	848
35°	1430	1428	1400	1368	1349	878
45°	633	718	720	685	594	489
55°	99	111	159	106	98	99
65°	31	32	33	31	29	31
75°	18	18	18	17	16	19
85°	6	6	5	5	5	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2006.3	2006.3	2006.3	2006.3	2006.3
2.5°	2016.3	2011.0	1994.8	2011.6	2007.9
5°	2016.9	2010.3	1991.9	2018.8	2015.9
7.5°	2014.8	2012.0	1997.8	2018.1	2013.8
10°	2014.0	2014.9	1994.8	2015.9	2013.0
12.5°	2013.2	2020.9	1991.7	2008.1	2001.5
15°	2008.2	2023.3	1982.3	1982.1	1972.6
17.5°	1986.9	2004.8	1950.0	1934.9	1923.4
20°	1963.0	1980.9	1916.9	1892.7	1888.0
22.5°	1925.3	1944.7	1876.1	1849.6	1841.8
25°	1854.3	1869.4	1799.5	1780.1	1769.7
27.5°	1759.7	1768.0	1702.4	1680.1	1665.8
30°	1681.2	1685.0	1633.1	1603.8	1581.2
32.5°	1588.1	1591.9	1546.2	1518.5	1500.4
35°	1430.2	1428.3	1400.4	1368.2	1349.4
37.5°	1232.6	1235.3	1213.2	1187.8	1168.8
40°	1096.5	1098.3	1080.1	1043.4	1038.7
42.5°	930.3	958.5	933.9	905.3	883.3
45°	632.9	718.4	720.4	684.7	594.4
47.5°	357.4	454.8	511.1	408.6	298.9
50°	225.1	290.9	381.8	242.5	205.8
52.5°	159.7	193.1	288.0	170.6	151.2
55°	99.1	111.3	158.7	105.6	98.1
57.5°	58.9	71.5	90.2	71.5	59.6
60°	40.4	50.7	66.4	46.9	36.5
62.5°	35.0	39.3	52.5	37.0	33.5
65°	30.8	31.7	32.7	30.7	28.9
67.5°	27.1	28.1	27.3	27.1	25.4
70°	24.0	25.0	25.0	24.0	23.1
72.5°	21.7	22.7	21.9	21.7	20.0
75°	18.3	18.3	18.3	17.3	16.4
77.5°	13.8	14.8	13.8	13.8	12.9
80°	11.5	12.5	11.5	11.5	10.6
82.5°	9.2	9.4	9.2	9.2	8.3
85°	5.8	5.8	4.8	4.8	4.8
87.5°	1.5	2.3	1.5	1.5	1.5
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	9.19	10.37	9.55	10.68	11.00	8.84	10.02	9.21	10.34	10.65
	3H	9.72	10.75	10.10	11.08	11.45	9.38	10.42	9.76	10.75	11.11
	4H	10.00	10.96	10.40	11.31	11.70	9.64	10.60	10.05	10.95	11.34
	6H	10.24	11.12	10.66	11.49	11.89	9.86	10.74	10.28	11.12	11.51
	8H	10.33	11.16	10.76	11.55	11.96	9.94	10.77	10.37	11.16	11.57
	12H	10.39	11.18	10.82	11.56	12.00	9.98	10.77	10.41	11.15	11.58
4H	2H	9.24	10.20	9.65	10.55	10.94	8.93	9.89	9.33	10.24	10.62
	3H	9.98	10.76	10.40	11.16	11.57	9.68	10.46	10.09	10.86	11.27
	4H	10.39	11.08	10.83	11.50	11.95	10.06	10.75	10.50	11.18	11.62
	6H	10.78	11.37	11.25	11.82	12.29	10.42	11.02	10.89	11.46	11.93
	8H	10.92	11.47	11.39	11.92	12.39	10.54	11.09	11.01	11.54	12.02
	12H	11.03	11.51	11.52	12.00	12.47	10.62	11.10	11.11	11.59	12.07
8H	4H	10.48	11.04	10.96	11.49	11.96	10.18	10.74	10.66	11.19	11.66
	6H	10.99	11.44	11.50	11.94	12.42	10.66	11.11	11.16	11.61	12.09
	8H	11.21	11.61	11.73	12.13	12.62	10.84	11.25	11.37	11.77	12.26
	12H	11.40	11.75	11.91	12.25	12.83	10.99	11.35	11.51	11.84	12.42
12H	4H	10.47	10.95	10.96	11.44	11.91	10.18	10.66	10.67	11.15	11.62
	6H	11.00	11.40	11.52	11.92	12.41	10.67	11.08	11.20	11.60	12.09
	8H	11.26	11.62	11.78	12.12	12.69	10.91	11.27	11.43	11.76	12.34