

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: P854284

Luminaire Tested: SQ2-PW1-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854284
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

Summary

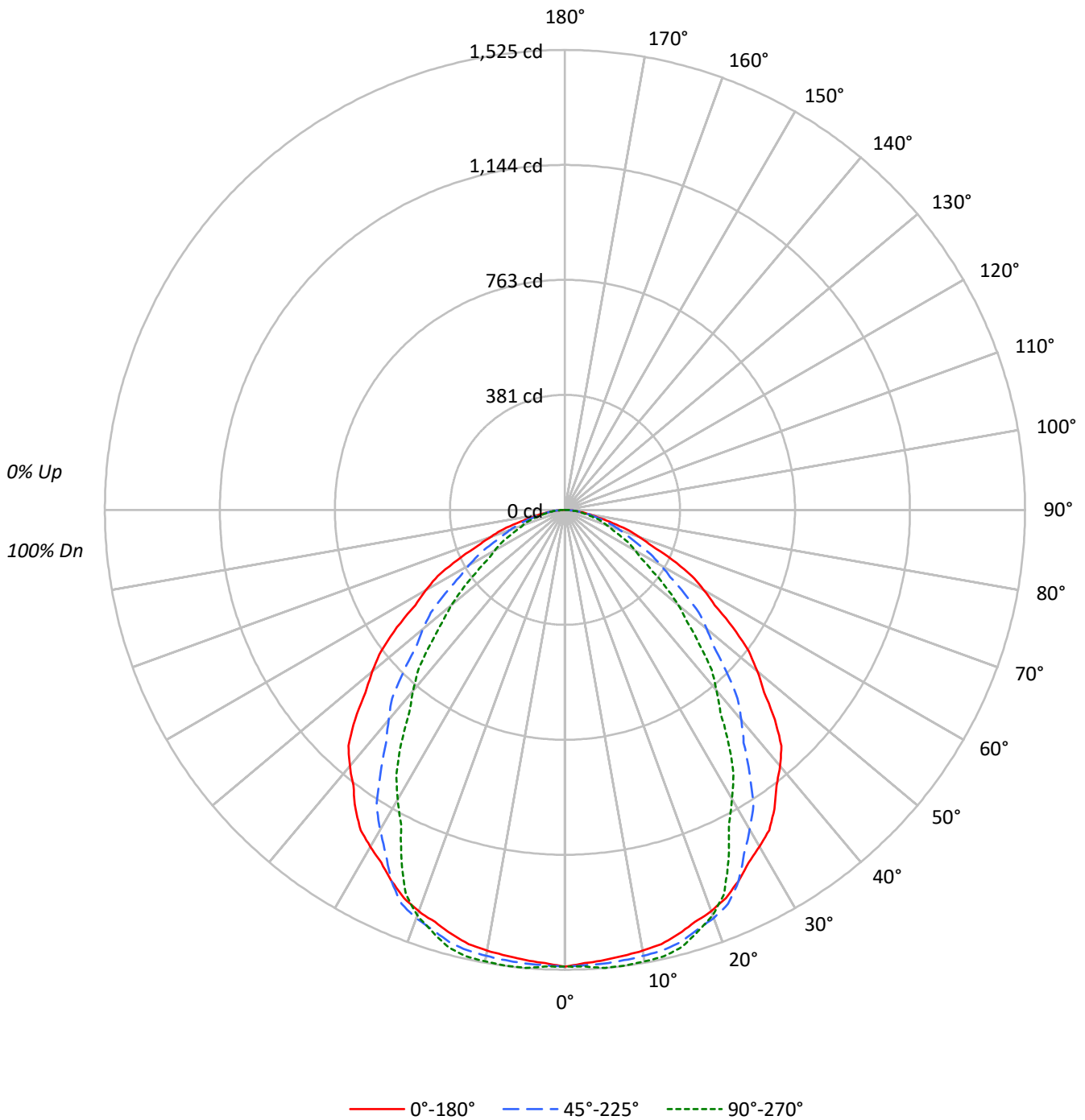
Lumens per Lamp: N/A
Luminaire Lumens: 3360.9 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74				74
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64				64
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				56
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49				49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44				44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	46	41	39				39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	37	47	42	37	35				35
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32				32
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24456	24456	24456
5°	24292	24480	24713
10°	24337	24620	24928
15°	24331	24789	25078
20°	24340	24761	24588
25°	24209	24235	22848
30°	24045	22835	20655
35°	23856	21013	18652
40°	23381	19155	16480
45°	22464	17228	14394
50°	20909	15400	12321
55°	19128	13605	9990
60°	17144	11832	8619
65°	14991	10197	7660
70°	12260	9059	6944
75°	9538	7829	6388
80°	7113	6704	5635
85°	4817	5076	3205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22464 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	4.3
10°-20°	417.9	12.4
20°-30°	615.0	18.3
30°-40°	672.4	20.0
40°-50°	603.2	17.9
50°-60°	450.0	13.4
60°-70°	284.4	8.5
70°-80°	140.9	4.2
80°-90°	33.0	1.0
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°	1177.1	35.0
0°-40°	1849.5	55.0
0°-60°	2902.7	86.4
0°-90°	3360.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3360.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1499	1523	1510	1512	1525	143
15°	1456	1484	1483	1493	1500	411
25°	1359	1388	1360	1304	1282	626
35°	1210	1198	1066	973	946	755
45°	984	905	754	660	630	754
55°	680	615	483	379	355	607
65°	392	360	267	215	200	389
75°	153	164	126	105	102	168
85°	26	33	27	19	17	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1514.7	1514.7	1514.7	1514.7	1514.7
2.5°	1504.3	1523.5	1511.3	1512.5	1515.9
5°	1498.8	1522.8	1510.4	1512.1	1524.8
7.5°	1491.3	1515.6	1506.3	1511.5	1523.9
10°	1484.4	1509.8	1501.7	1509.2	1520.5
12.5°	1475.2	1501.7	1496.0	1504.6	1515.9
15°	1455.6	1483.8	1483.0	1493.2	1500.3
17.5°	1432.8	1461.0	1459.6	1462.3	1465.7
20°	1416.6	1444.8	1441.1	1431.0	1431.0
22.5°	1393.5	1424.0	1414.6	1387.0	1378.0
25°	1358.9	1388.5	1360.4	1303.6	1282.5
27.5°	1318.5	1342.5	1285.9	1205.3	1176.0
30°	1289.7	1308.0	1224.8	1136.1	1107.9
32.5°	1259.7	1266.7	1162.4	1070.3	1039.8
35°	1210.3	1197.6	1066.1	973.1	946.3
37.5°	1152.0	1114.2	973.5	876.1	846.5
40°	1109.3	1055.7	908.8	811.5	781.9
42.5°	1062.0	994.9	847.7	750.3	719.6
45°	983.8	904.9	754.5	660.0	630.4
47.5°	895.8	817.4	667.3	575.9	550.5
50°	832.4	756.2	613.1	521.5	490.5
52.5°	767.7	699.5	560.0	465.9	423.5
55°	679.5	614.6	483.3	378.9	354.9
57.5°	588.6	532.4	413.7	318.9	299.2
60°	530.9	481.5	366.4	286.6	266.9
62.5°	475.5	431.7	320.3	256.7	240.3
65°	392.4	359.9	266.9	214.6	200.5
67.5°	311.6	293.5	221.9	176.1	166.8
70°	259.7	254.0	191.9	154.2	147.1
72.5°	214.7	216.9	163.0	133.5	128.7
75°	152.9	164.2	125.5	105.2	102.4
77.5°	104.2	121.1	92.9	77.8	75.6
80°	76.5	93.4	72.1	60.6	60.6
82.5°	53.4	66.9	51.4	45.6	45.6
85°	26.0	33.0	27.4	18.7	17.3
87.5°	6.9	10.3	4.6	3.5	3.5
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	22.08	23.58	22.44	23.89	24.21	18.56	20.07	18.93	20.38	20.70
	3H	23.45	24.79	23.82	25.12	25.48	19.82	21.16	20.19	21.49	21.85
	4H	23.85	25.11	24.25	25.46	25.84	20.29	21.55	20.69	21.90	22.28
	6H	24.08	25.25	24.49	25.61	26.01	20.64	21.80	21.05	22.17	22.56
	8H	24.13	25.24	24.56	25.63	26.03	20.73	21.84	21.16	22.23	22.63
	12H	24.15	25.21	24.58	25.59	26.02	20.76	21.82	21.19	22.20	22.63
4H	2H	22.26	23.52	22.66	23.87	24.25	19.32	20.58	19.72	20.93	21.31
	3H	23.86	24.90	24.27	25.30	25.70	20.76	21.81	21.18	22.21	22.61
	4H	24.39	25.33	24.82	25.74	26.18	21.33	22.27	21.77	22.69	23.13
	6H	24.75	25.57	25.21	26.01	26.47	21.77	22.59	22.23	23.03	23.49
	8H	24.84	25.60	25.31	26.05	26.52	21.89	22.65	22.35	23.09	23.56
	12H	24.89	25.57	25.37	26.04	26.52	21.94	22.62	22.42	23.10	23.57
8H	4H	24.47	25.23	24.93	25.68	26.14	21.70	22.47	22.17	22.91	23.38
	6H	24.93	25.56	25.43	26.05	26.53	22.23	22.86	22.73	23.35	23.83
	8H	25.07	25.64	25.59	26.15	26.64	22.40	22.96	22.91	23.47	23.96
	12H	25.17	25.67	25.68	26.16	26.72	22.48	22.98	22.99	23.47	24.04
12H	4H	24.46	25.14	24.94	25.62	26.09	21.75	22.43	22.23	22.91	23.38
	6H	24.92	25.48	25.44	26.00	26.48	22.30	22.86	22.81	23.37	23.86
	8H	25.11	25.61	25.62	26.10	26.67	22.51	23.01	23.02	23.50	24.07