

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: P855480

Luminaire Tested: SQ2-PW1-125D-840-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855480
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-PW1-125D-840-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

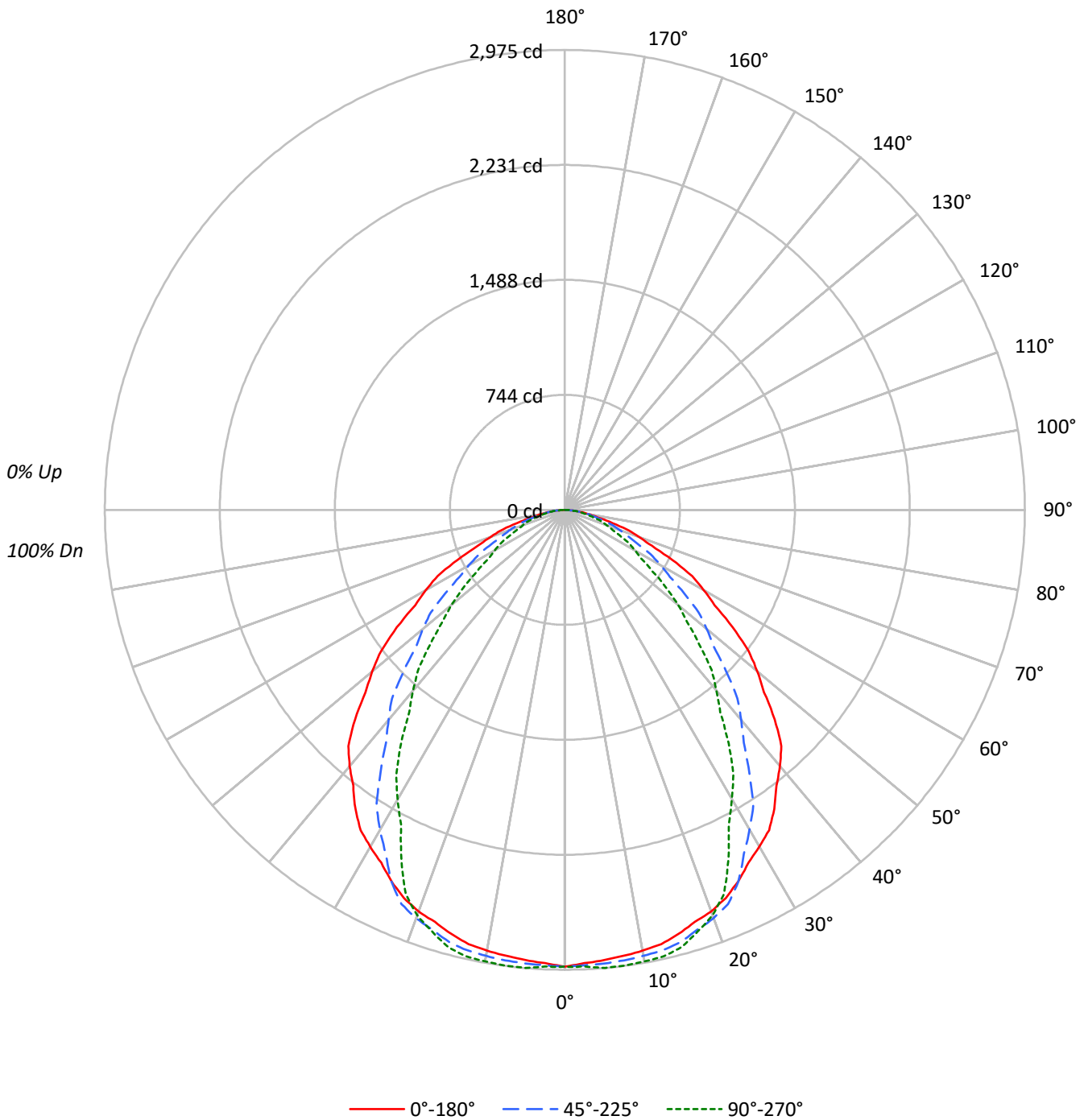
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6557.2 lumens
Efficiency: N/A
Efficacy: 133.3 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): 49.2
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: P855480
CATALOG NUMBER: SQ2-PW1-125D-840-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P855480

CATALOG NUMBER: SQ2-PW1-125D-840-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				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°	47714	47714	47714
5°	47396	47760	48216
10°	47481	48035	48636
15°	47468	48363	48928
20°	47489	48309	47972
25°	47233	47283	44575
30°	46911	44549	40300
35°	46542	40996	36391
40°	45619	37374	32153
45°	43829	33611	28085
50°	40792	30047	24036
55°	37315	26539	19491
60°	33444	23085	16814
65°	29249	19893	14946
70°	23915	17670	13548
75°	18609	15278	12470
80°	13873	13092	10990
85°	9392	9911	6262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 43829 cd/sqm



TEST NUMBER: P855480

CATALOG NUMBER: SQ2-PW1-125D-840-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.4	4.3
10°-20°	815.3	12.4
20°-30°	1199.9	18.3
30°-40°	1311.9	20.0
40°-50°	1176.9	17.9
50°-60°	877.9	13.4
60°-70°	554.8	8.5
70°-80°	274.8	4.2
80°-90°	64.3	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°	2296.6	35.0
0°-40°	3608.5	55.0
0°-60°	5663.2	86.4
0°-90°	6557.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6557.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2955	2955	2955	2955	2955	
5°	2924	2971	2947	2950	2975	278
15°	2840	2895	2893	2913	2927	802
25°	2651	2709	2654	2543	2502	1221
35°	2361	2337	2080	1899	1846	1473
45°	1920	1765	1472	1288	1230	1472
55°	1326	1199	943	739	692	1184
65°	766	702	521	419	391	759
75°	298	320	245	205	200	329
85°	51	64	54	36	34	66
90°	0	0	0	0	0	



TEST NUMBER: P855480

CATALOG NUMBER: SQ2-PW1-125D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2955.2	2955.2	2955.2	2955.2	2955.2
2.5°	2934.9	2972.4	2948.5	2950.9	2957.4
5°	2924.3	2971.1	2946.8	2950.2	2974.9
7.5°	2909.7	2957.0	2938.9	2949.0	2973.3
10°	2896.1	2945.7	2929.9	2944.5	2966.5
12.5°	2878.1	2929.8	2918.6	2935.5	2957.4
15°	2839.8	2894.9	2893.3	2913.4	2927.1
17.5°	2795.3	2850.5	2847.8	2852.9	2859.5
20°	2763.9	2818.9	2811.6	2792.0	2792.0
22.5°	2718.9	2778.3	2759.9	2706.1	2688.5
25°	2651.3	2709.1	2654.1	2543.4	2502.1
27.5°	2572.5	2619.2	2508.9	2351.7	2294.4
30°	2516.2	2552.0	2389.5	2216.6	2161.6
32.5°	2457.6	2471.3	2268.0	2088.2	2028.7
35°	2361.3	2336.6	2079.9	1898.6	1846.3
37.5°	2247.7	2173.9	1899.3	1709.3	1651.6
40°	2164.4	2059.8	1773.2	1583.3	1525.5
42.5°	2072.1	1941.1	1653.8	1463.9	1403.8
45°	1919.5	1765.3	1472.0	1287.8	1230.0
47.5°	1747.9	1594.9	1302.0	1123.6	1074.0
50°	1624.0	1475.4	1196.2	1017.5	956.9
52.5°	1497.9	1364.7	1092.6	908.9	826.4
55°	1325.6	1199.1	942.8	739.1	692.4
57.5°	1148.3	1038.8	807.2	622.2	583.7
60°	1035.7	939.4	714.9	559.2	520.7
62.5°	927.7	842.4	624.8	500.8	468.8
65°	765.6	702.3	520.7	418.7	391.2
67.5°	608.0	572.7	432.8	343.6	325.4
70°	506.6	495.6	374.3	300.8	287.0
72.5°	418.8	423.2	318.0	260.5	251.0
75°	298.3	320.4	244.9	205.3	199.9
77.5°	203.2	236.2	181.2	151.9	147.4
80°	149.2	182.2	140.8	118.2	118.2
82.5°	104.2	130.5	100.2	88.9	88.9
85°	50.7	64.4	53.5	36.5	33.8
87.5°	13.5	20.2	9.0	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P855480

CATALOG NUMBER: SQ2-PW1-125D-840-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	24.40	25.90	24.76	26.22	26.53	20.89	22.39	21.25	22.70	23.02
	3H	25.77	27.11	26.15	27.44	27.80	22.14	23.48	22.51	23.81	24.17
	4H	26.17	27.43	26.57	27.78	28.16	22.61	23.87	23.01	24.22	24.60
	6H	26.40	27.57	26.82	27.93	28.33	22.96	24.12	23.37	24.49	24.88
	8H	26.45	27.56	26.88	27.95	28.35	23.05	24.16	23.48	24.55	24.95
	12H	26.47	27.53	26.90	27.91	28.34	23.08	24.14	23.51	24.53	24.95
4H	2H	24.58	25.84	24.98	26.19	26.57	21.64	22.90	22.04	23.25	23.63
	3H	26.18	27.22	26.59	27.62	28.02	23.09	24.13	23.50	24.53	24.93
	4H	26.71	27.65	27.14	28.06	28.50	23.66	24.59	24.09	25.01	25.45
	6H	27.07	27.89	27.53	28.33	28.79	24.09	24.91	24.55	25.35	25.81
	8H	27.16	27.93	27.63	28.37	28.84	24.21	24.97	24.67	25.42	25.88
	12H	27.21	27.89	27.69	28.37	28.84	24.26	24.94	24.74	25.42	25.89
8H	4H	26.79	27.55	27.26	28.00	28.47	24.03	24.79	24.49	25.23	25.70
	6H	27.25	27.88	27.75	28.37	28.85	24.55	25.18	25.05	25.67	26.15
	8H	27.40	27.96	27.91	28.47	28.96	24.72	25.28	25.23	25.79	26.28
	12H	27.49	27.99	28.00	28.48	29.05	24.81	25.30	25.32	25.80	26.36
12H	4H	26.78	27.46	27.26	27.94	28.41	24.07	24.75	24.55	25.23	25.70
	6H	27.24	27.81	27.76	28.32	28.81	24.62	25.19	25.14	25.70	26.18
	8H	27.43	27.93	27.94	28.42	28.99	24.83	25.33	25.34	25.82	26.39