

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: P845537

Luminaire Tested: SQ2R-FB-125D-840-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-12)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-FB-125D-840-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

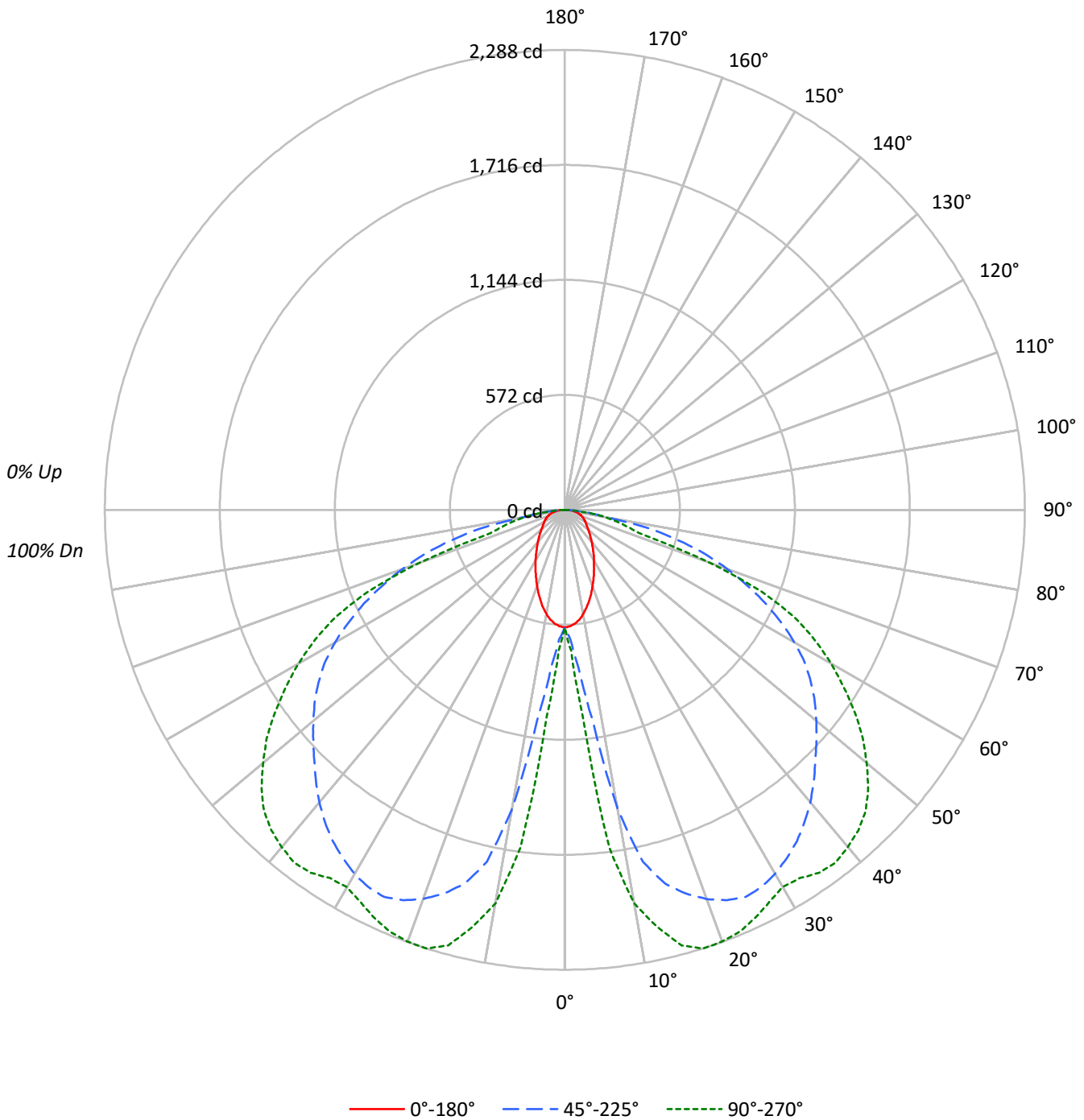
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5797.2 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 2.99 / 2.56
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: 0.9979
Total Harmonic Distortion (THDi): 0.0523
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9452	9452	9452
5°	9214	12773	16741
10°	8629	24733	32577
15°	7809	32179	37496
20°	6916	35398	39268
25°	6118	37857	39911
30°	5405	38988	40404
35°	4827	39665	43438
40°	4390	40042	46152
45°	4048	40231	48327
50°	3818	41003	49205
55°	3724	42069	49596
60°	3817	42625	49351
65°	3977	42044	47958
70°	4116	40655	36274
75°	4566	36519	20019
80°	4714	18838	18577
85°	4687	13042	7818

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 49596 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	1.7
10°-20°	449.4	7.8
20°-30°	791.0	13.6
30°-40°	1023.0	17.6
40°-50°	1128.4	19.5
50°-60°	1052.5	18.2
60°-70°	814.5	14.1
70°-80°	372.3	6.4
80°-90°	69.6	1.2
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°	1336.8	23.1
0°-40°	2359.8	40.7
0°-60°	4540.8	78.3
0°-90°	5797.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5797.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	568	653	788	960	1033	53
15°	467	932	1925	2153	2243	130
25°	343	1258	2125	2218	2240	158
35°	245	1216	2012	2080	2204	154
45°	177	932	1762	2021	2116	137
55°	132	554	1494	1717	1762	119
65°	104	312	1100	1233	1255	102
75°	73	191	585	315	321	75
85°	25	56	70	48	42	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	585.4	585.4	585.4	585.4	585.4
2.5°	579.8	610.7	644.5	683.9	700.8
5°	568.5	653.0	788.1	959.7	1032.9
7.5°	551.6	706.4	1055.4	1531.1	1694.3
10°	526.3	765.5	1508.6	1908.2	1987.0
12.5°	498.2	844.4	1792.8	2043.3	2125.0
15°	467.2	931.6	1925.1	2153.1	2243.2
17.5°	436.2	1027.3	2001.1	2234.7	2288.2
20°	402.5	1128.6	2060.2	2254.4	2285.4
22.5°	371.5	1204.6	2102.4	2237.5	2271.3
25°	343.4	1258.1	2125.0	2217.8	2240.3
27.5°	315.2	1277.8	2116.5	2181.2	2200.9
30°	289.9	1272.2	2091.2	2136.2	2167.2
32.5°	267.4	1255.3	2054.6	2096.8	2172.8
35°	244.9	1215.9	2012.4	2079.9	2203.8
37.5°	225.2	1159.6	1958.9	2088.4	2212.2
40°	208.3	1094.8	1899.8	2088.4	2189.7
42.5°	191.4	1018.9	1832.2	2060.2	2161.5
45°	177.3	931.6	1761.9	2020.8	2116.5
47.5°	163.2	835.9	1697.1	1973.0	2046.1
50°	152.0	737.4	1632.4	1902.6	1958.9
52.5°	140.7	641.7	1567.7	1818.2	1868.8
55°	132.3	554.5	1494.5	1716.8	1761.9
57.5°	123.8	475.7	1415.7	1609.9	1646.5
60°	118.2	413.7	1320.0	1491.7	1528.3
62.5°	109.8	357.4	1213.1	1367.9	1401.6
65°	104.1	312.4	1100.5	1232.8	1255.3
67.5°	95.7	275.8	982.3	1078.0	1055.4
70°	87.2	250.5	861.2	889.4	768.4
72.5°	81.6	222.3	729.0	644.5	388.4
75°	73.2	191.4	585.4	315.2	320.9
77.5°	61.9	154.8	430.6	253.3	258.9
80°	50.7	121.0	202.6	197.0	199.8
82.5°	39.4	87.2	123.8	132.3	126.7
85°	25.3	56.3	70.4	47.8	42.2
87.5°	11.3	25.3	14.1	14.1	14.1
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	18.70	20.38	19.06	20.70	21.01	27.35	29.04	27.72	29.35	29.67
	3H	19.49	21.01	19.86	21.34	21.70	29.04	30.56	29.42	30.89	31.25
	4H	19.82	21.26	20.22	21.61	21.98	29.26	30.69	29.65	31.04	31.41
	6H	20.08	21.41	20.49	21.77	22.16	29.38	30.71	29.79	31.08	31.47
	8H	20.16	21.43	20.58	21.82	22.22	29.41	30.68	29.84	31.07	31.47
	12H	20.21	21.43	20.64	21.81	22.24	29.41	30.63	29.84	31.01	31.44
4H	2H	23.14	24.57	23.53	24.92	25.29	27.89	29.33	28.29	29.68	30.05
	3H	24.15	25.35	24.56	25.75	26.15	29.80	31.00	30.21	31.40	31.80
	4H	24.47	25.56	24.90	25.97	26.40	30.07	31.16	30.50	31.57	32.00
	6H	24.65	25.60	25.11	26.04	26.49	30.27	31.21	30.72	31.65	32.11
	8H	24.70	25.58	25.16	26.02	26.49	30.31	31.20	30.77	31.64	32.10
	12H	24.73	25.52	25.21	26.00	26.47	30.33	31.12	30.80	31.59	32.06
8H	4H	25.71	26.59	26.17	27.03	27.50	30.26	31.14	30.72	31.59	32.05
	6H	25.99	26.72	26.48	27.21	27.68	30.50	31.24	31.00	31.72	32.20
	8H	26.07	26.72	26.58	27.23	27.72	30.58	31.23	31.08	31.74	32.22
	12H	26.14	26.71	26.64	27.20	27.76	30.61	31.19	31.11	31.68	32.24
12H	4H	25.77	26.56	26.25	27.03	27.50	30.25	31.05	30.73	31.52	31.99
	6H	26.09	26.75	26.60	27.25	27.74	30.50	31.15	31.00	31.66	32.14
	8H	26.24	26.81	26.74	27.30	27.86	30.60	31.18	31.11	31.67	32.23