

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: P845536

Luminaire Tested: SQ2R-FB-125D-835-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845536
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-835-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

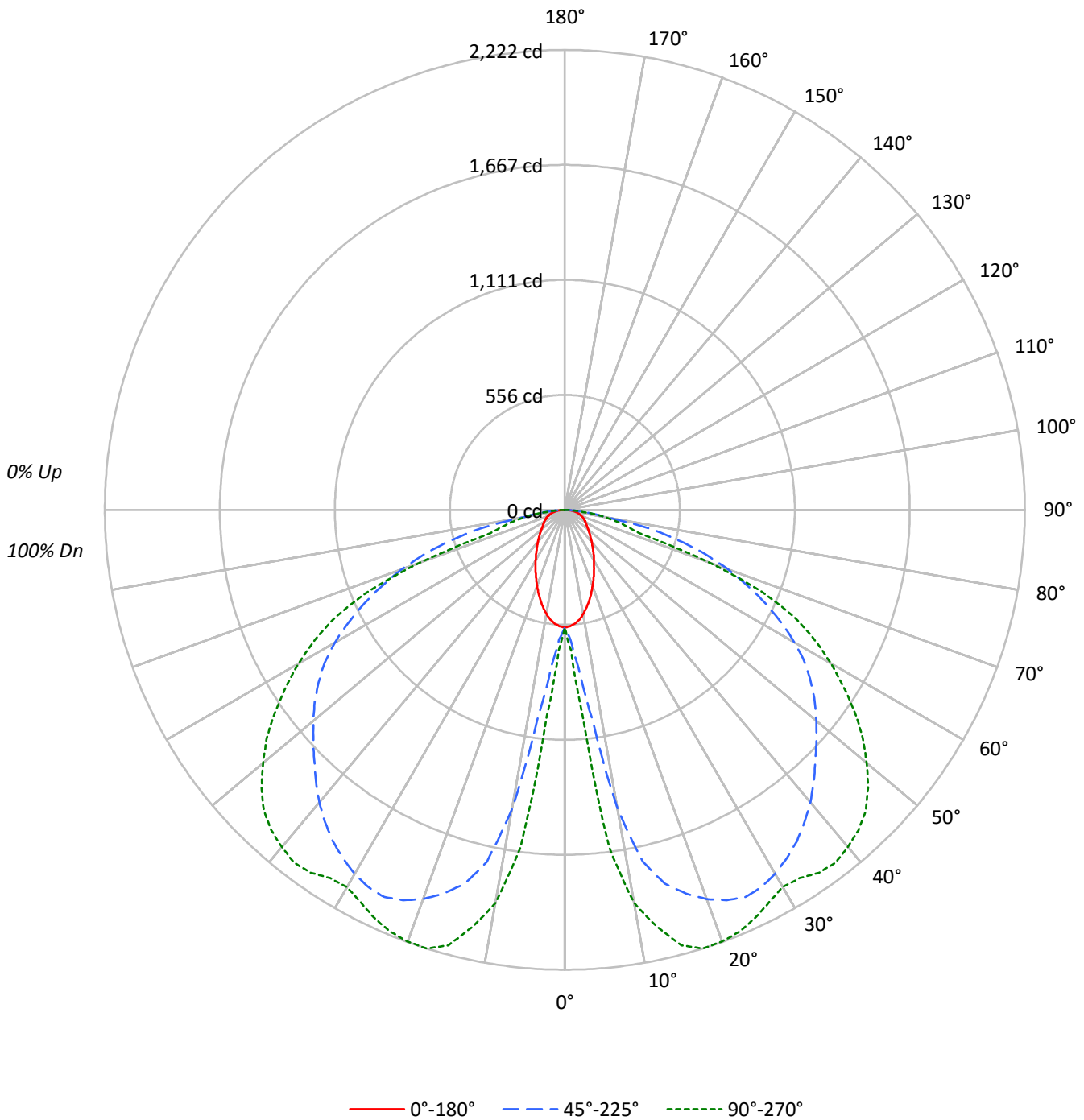
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5629.4 lumens
Efficiency: N/A
Efficacy: 114.4 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°	9179	9179	9179
5°	8948	12402	16256
10°	8379	24017	31634
15°	7584	31248	36409
20°	6715	34374	38130
25°	5940	36759	38756
30°	5248	37858	39234
35°	4687	38516	42180
40°	4262	38883	44816
45°	3932	39066	46928
50°	3707	39818	47780
55°	3617	40850	48161
60°	3707	41391	47921
65°	3862	40825	46567
70°	3998	39479	35221
75°	4435	35465	19438
80°	4575	18299	18038
85°	4557	12653	7595

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 48161 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.6	1.7
10°-20°	436.4	7.8
20°-30°	768.1	13.6
30°-40°	993.4	17.6
40°-50°	1095.7	19.5
50°-60°	1022.1	18.2
60°-70°	790.9	14.1
70°-80°	361.5	6.4
80°-90°	67.6	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°	1298.1	23.1
0°-40°	2291.5	40.7
0°-60°	4409.3	78.3
0°-90°	5629.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5629.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	552	634	765	932	1003	51
15°	454	905	1869	2091	2178	127
25°	333	1222	2063	2154	2176	153
35°	238	1181	1954	2020	2140	149
45°	172	905	1711	1962	2055	133
55°	128	538	1451	1667	1711	116
65°	101	303	1069	1197	1219	99
75°	71	186	568	306	312	73
85°	25	55	68	46	41	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	568.5	568.5	568.5	568.5	568.5
2.5°	563.0	593.1	625.9	664.1	680.5
5°	552.1	634.1	765.2	932.0	1003.0
7.5°	535.7	686.0	1024.9	1486.8	1645.3
10°	511.1	743.4	1464.9	1853.0	1929.5
12.5°	483.7	819.9	1740.9	1984.2	2063.4
15°	453.7	904.6	1869.4	2090.8	2178.2
17.5°	423.6	997.6	1943.2	2170.0	2222.0
20°	390.8	1095.9	2000.6	2189.2	2219.2
22.5°	360.8	1169.7	2041.6	2172.8	2205.6
25°	333.4	1221.7	2063.4	2153.6	2175.5
27.5°	306.1	1240.8	2055.2	2118.1	2137.2
30°	281.5	1235.3	2030.6	2074.4	2104.4
32.5°	259.6	1218.9	1995.1	2036.1	2109.9
35°	237.8	1180.7	1954.1	2019.7	2140.0
37.5°	218.6	1126.0	1902.2	2027.9	2148.2
40°	202.2	1063.1	1844.8	2027.9	2126.3
42.5°	185.8	989.4	1779.2	2000.6	2099.0
45°	172.2	904.6	1710.9	1962.3	2055.2
47.5°	158.5	811.7	1648.0	1915.9	1986.9
50°	147.6	716.1	1585.2	1847.5	1902.2
52.5°	136.7	623.1	1522.3	1765.5	1814.7
55°	128.5	538.4	1451.2	1667.1	1710.9
57.5°	120.3	461.9	1374.7	1563.3	1598.8
60°	114.8	401.8	1281.8	1448.5	1484.0
62.5°	106.6	347.1	1177.9	1328.3	1361.0
65°	101.1	303.4	1068.6	1197.1	1218.9
67.5°	92.9	267.8	953.8	1046.8	1024.9
70°	84.7	243.2	836.3	863.6	746.1
72.5°	79.3	215.9	707.9	625.9	377.2
75°	71.1	185.8	568.5	306.1	311.6
77.5°	60.1	150.3	418.2	246.0	251.4
80°	49.2	117.5	196.8	191.3	194.0
82.5°	38.3	84.7	120.3	128.5	123.0
85°	24.6	54.7	68.3	46.5	41.0
87.5°	10.9	24.6	13.7	13.7	13.7
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	18.60	20.28	18.96	20.60	20.91	27.25	28.94	27.62	29.25	29.57
	3H	19.39	20.91	19.76	21.24	21.60	28.94	30.46	29.31	30.79	31.15
	4H	19.72	21.16	20.12	21.50	21.88	29.15	30.59	29.55	30.94	31.31
	6H	19.98	21.31	20.39	21.67	22.06	29.28	30.61	29.69	30.97	31.37
	8H	20.06	21.33	20.48	21.72	22.11	29.31	30.58	29.73	30.97	31.37
	12H	20.11	21.33	20.54	21.71	22.14	29.31	30.53	29.74	30.91	31.34
4H	2H	23.03	24.47	23.43	24.82	25.19	27.79	29.23	28.19	29.57	29.95
	3H	24.05	25.25	24.46	25.64	26.04	29.70	30.90	30.11	31.29	31.69
	4H	24.37	25.45	24.80	25.87	26.30	29.97	31.05	30.40	31.47	31.90
	6H	24.55	25.50	25.00	25.94	26.39	30.16	31.11	30.62	31.55	32.00
	8H	24.59	25.48	25.05	25.92	26.38	30.21	31.09	30.67	31.54	32.00
	12H	24.63	25.42	25.11	25.89	26.36	30.22	31.02	30.70	31.49	31.96
8H	4H	25.61	26.49	26.07	26.93	27.40	30.16	31.04	30.62	31.48	31.95
	6H	25.88	26.62	26.38	27.10	27.58	30.40	31.13	30.89	31.62	32.09
	8H	25.97	26.62	26.48	27.13	27.61	30.47	31.13	30.98	31.63	32.12
	12H	26.03	26.61	26.54	27.10	27.66	30.51	31.08	31.01	31.57	32.13
12H	4H	25.66	26.46	26.14	26.93	27.40	30.15	30.94	30.63	31.42	31.89
	6H	25.99	26.64	26.50	27.15	27.63	30.39	31.05	30.90	31.56	32.04
	8H	26.13	26.71	26.64	27.20	27.76	30.50	31.08	31.01	31.57	32.13