

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: P845535

Luminaire Tested: SQ2R-FB-125D-830-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845535
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-830-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

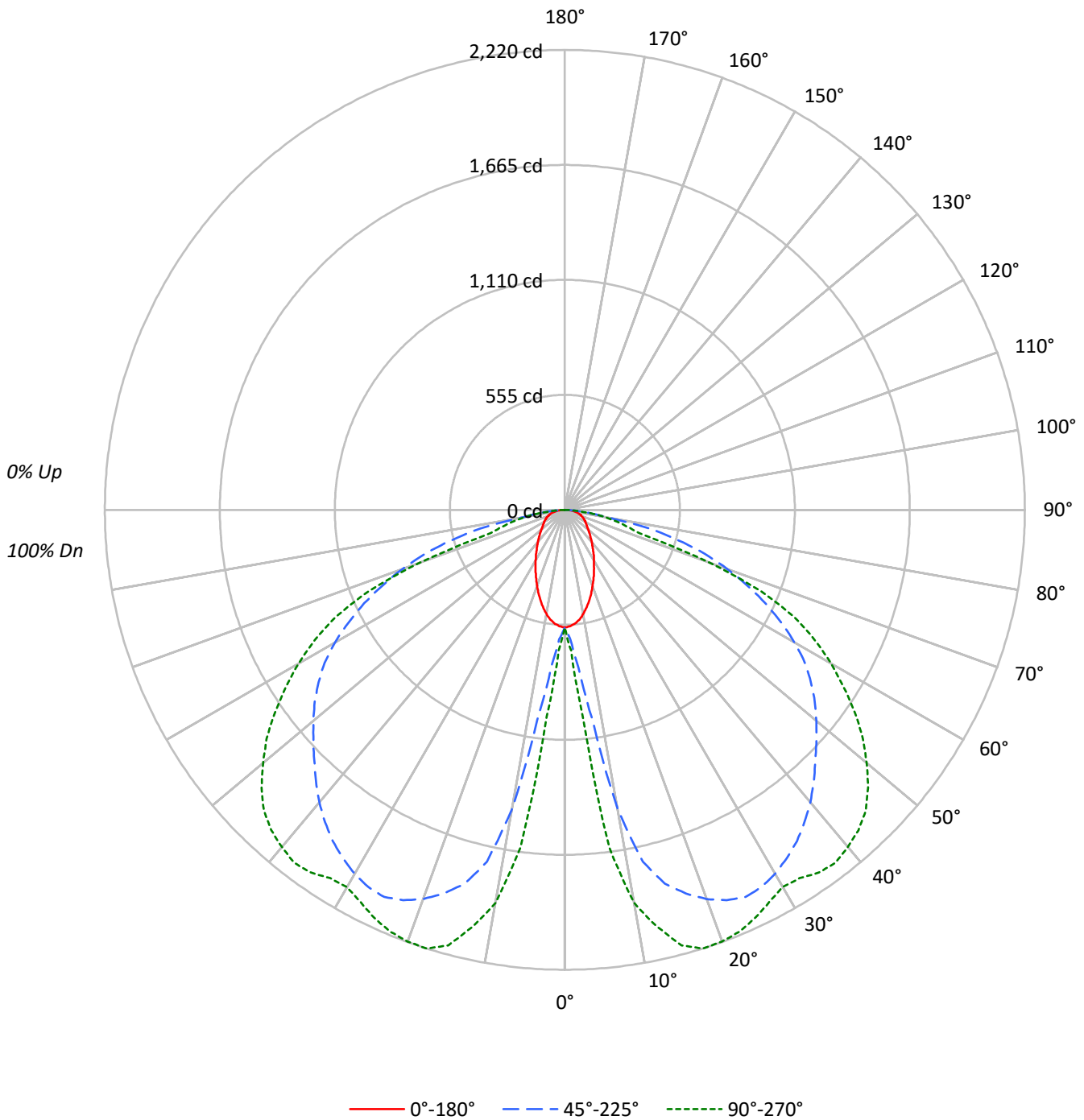
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5624.3 lumens
Efficiency: N/A
Efficacy: 114.3 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	50	30	10	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84	84	84	
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69	69	69	
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57	57	57	
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48	48	48	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	41	41	
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35	35	35	
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31	31	31	
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27	27	27	
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24	24	24	
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21	21	21	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9171	9171	9171
5°	8940	12392	16242
10°	8371	23996	31606
15°	7577	31219	36378
20°	6710	34343	38096
25°	5934	36727	38721
30°	5243	37824	39198
35°	4683	38483	42141
40°	4260	38847	44776
45°	3927	39030	46887
50°	3705	39780	47738
55°	3612	40814	48116
60°	3704	41353	47879
65°	3859	40791	46525
70°	3994	39446	35188
75°	4429	35433	19420
80°	4575	18280	18029
85°	4557	12653	7595

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 48116 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	1.7
10°-20°	436.0	7.8
20°-30°	767.4	13.6
30°-40°	992.5	17.6
40°-50°	1094.7	19.5
50°-60°	1021.1	18.2
60°-70°	790.2	14.1
70°-80°	361.2	6.4
80°-90°	67.5	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°	1296.9	23.1
0°-40°	2289.5	40.7
0°-60°	4405.3	78.3
0°-90°	5624.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5624.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	552	634	765	931	1002	51
15°	453	904	1868	2089	2176	127
25°	333	1221	2062	2152	2174	153
35°	238	1180	1952	2018	2138	149
45°	172	904	1709	1960	2053	133
55°	128	538	1450	1666	1709	115
65°	101	303	1068	1196	1218	99
75°	71	186	568	306	311	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°	568.0	568.0	568.0	568.0	568.0
2.5°	562.5	592.5	625.3	663.5	679.9
5°	551.6	633.5	764.6	931.1	1002.1
7.5°	535.2	685.4	1024.0	1485.4	1643.8
10°	510.6	742.7	1463.6	1851.3	1927.8
12.5°	483.3	819.2	1739.4	1982.4	2061.6
15°	453.3	903.8	1867.7	2088.9	2176.3
17.5°	423.2	996.7	1941.4	2168.1	2219.9
20°	390.5	1095.0	1998.8	2187.2	2217.2
22.5°	360.4	1168.7	2039.7	2170.8	2203.6
25°	333.1	1220.6	2061.6	2151.7	2173.5
27.5°	305.8	1239.7	2053.4	2116.2	2135.3
30°	281.2	1234.2	2028.8	2072.5	2102.5
32.5°	259.4	1217.8	1993.3	2034.3	2108.0
35°	237.6	1179.6	1952.4	2017.9	2138.0
37.5°	218.4	1125.0	1900.5	2026.1	2146.2
40°	202.1	1062.2	1843.1	2026.1	2124.4
42.5°	185.7	988.5	1777.6	1998.8	2097.1
45°	172.0	903.8	1709.3	1960.5	2053.4
47.5°	158.4	811.0	1646.5	1914.1	1985.1
50°	147.5	715.4	1583.7	1845.9	1900.5
52.5°	136.5	622.6	1520.9	1763.9	1813.1
55°	128.3	537.9	1449.9	1665.6	1709.3
57.5°	120.1	461.5	1373.5	1561.9	1597.4
60°	114.7	401.4	1280.6	1447.2	1482.7
62.5°	106.5	346.8	1176.9	1327.1	1359.8
65°	101.0	303.1	1067.7	1196.0	1217.8
67.5°	92.8	267.6	953.0	1045.8	1024.0
70°	84.6	243.0	835.6	862.9	745.4
72.5°	79.2	215.7	707.2	625.3	376.8
75°	71.0	185.7	568.0	305.8	311.3
77.5°	60.1	150.2	417.8	245.8	251.2
80°	49.2	117.4	196.6	191.1	193.9
82.5°	38.2	84.6	120.1	128.3	122.9
85°	24.6	54.6	68.3	46.4	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	18.59	20.28	18.96	20.59	20.91	27.25	28.93	27.61	29.25	29.56
	3H	19.38	20.91	19.76	21.23	21.59	28.93	30.46	29.31	30.78	31.14
	4H	19.72	21.15	20.12	21.50	21.87	29.15	30.59	29.55	30.93	31.31
	6H	19.97	21.30	20.38	21.67	22.06	29.28	30.61	29.69	30.97	31.36
	8H	20.05	21.32	20.48	21.71	22.11	29.31	30.58	29.73	30.97	31.36
	12H	20.11	21.33	20.54	21.71	22.14	29.31	30.52	29.73	30.90	31.33
4H	2H	23.03	24.47	23.43	24.81	25.19	27.79	29.22	28.19	29.57	29.94
	3H	24.04	25.25	24.45	25.64	26.04	29.69	30.89	30.10	31.29	31.69
	4H	24.37	25.45	24.80	25.86	26.30	29.97	31.05	30.40	31.46	31.90
	6H	24.55	25.49	25.00	25.93	26.39	30.16	31.11	30.61	31.55	32.00
	8H	24.59	25.47	25.05	25.92	26.38	30.21	31.09	30.67	31.53	32.00
	12H	24.62	25.42	25.10	25.89	26.36	30.22	31.01	30.70	31.49	31.96
8H	4H	25.60	26.49	26.06	26.93	27.39	30.15	31.04	30.61	31.48	31.94
	6H	25.88	26.61	26.37	27.10	27.58	30.40	31.13	30.89	31.62	32.09
	8H	25.97	26.62	26.47	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	30.50	31.08	31.01	31.57	32.13
12H	4H	25.66	26.45	26.14	26.93	27.40	30.15	30.94	30.63	31.42	31.88
	6H	25.98	26.64	26.49	27.15	27.63	30.39	31.05	30.90	31.55	32.04
	8H	26.13	26.71	26.64	27.20	27.76	30.50	31.08	31.00	31.57	32.13