

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: P845529

Luminaire Tested: SQ2R-FB-100D-830-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845529
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-100D-830-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

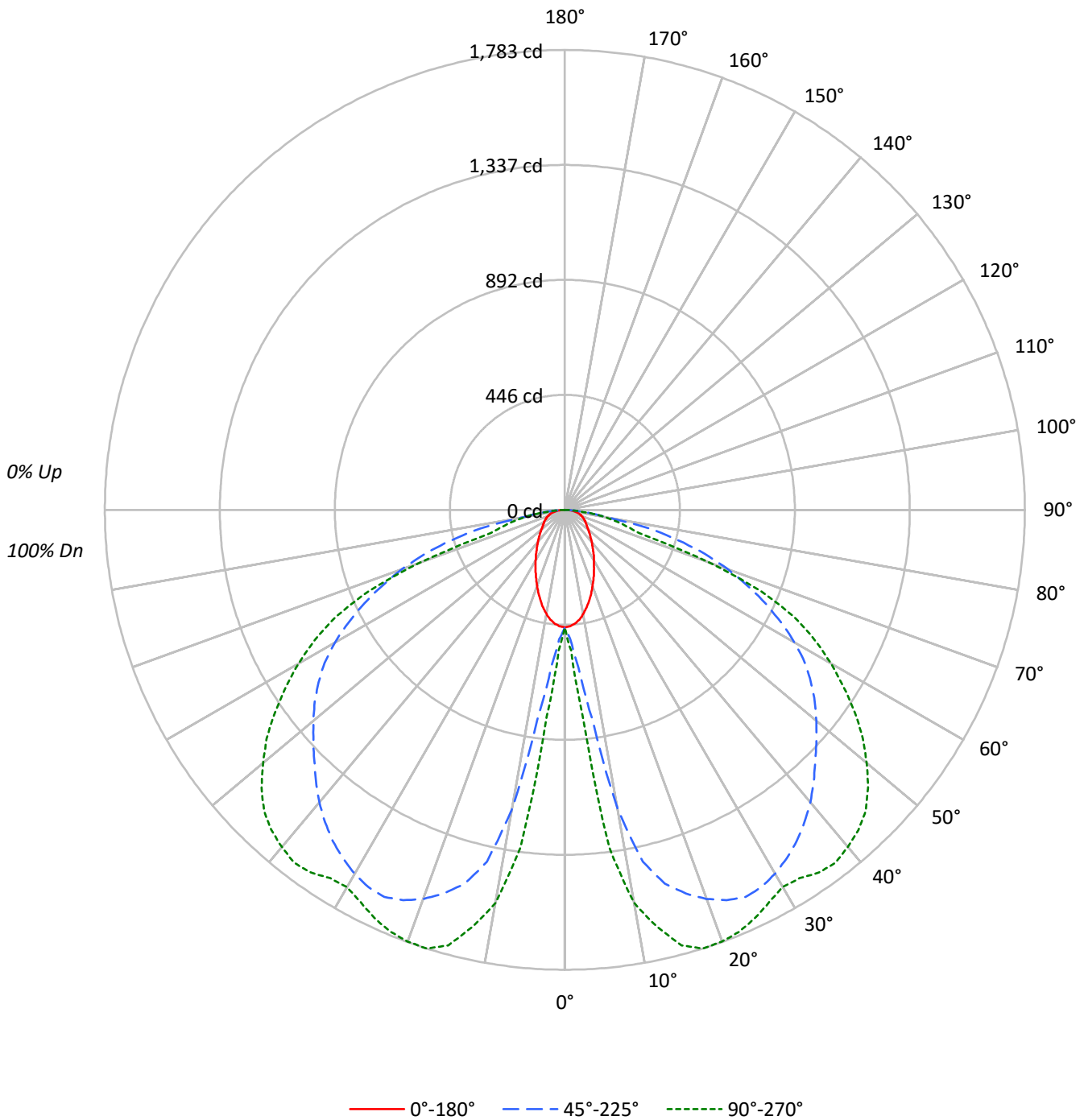
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4517.0 lumens
Efficiency: N/A
Efficacy: 120.1 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): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9969
Total Harmonic Distortion (THDi): 0.066
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									
RC	80									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																			
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°	7364	7364	7364
5°	7180	9951	13044
10°	6724	19271	25383
15°	6084	25073	29215
20°	5388	27581	30596
25°	4766	29496	31098
30°	4212	30378	31482
35°	3761	30906	33845
40°	3421	31198	35959
45°	3156	31346	37655
50°	2974	31948	38338
55°	2902	32780	38644
60°	2974	33212	38453
65°	3098	32756	37368
70°	3210	31676	28263
75°	3556	28453	15596
80°	3673	14682	14477
85°	3649	10152	6095

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 38644 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	1.7
10°-20°	350.1	7.8
20°-30°	616.3	13.6
30°-40°	797.1	17.6
40°-50°	879.2	19.5
50°-60°	820.1	18.2
60°-70°	634.6	14.1
70°-80°	290.1	6.4
80°-90°	54.2	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°	1041.6	23.1
0°-40°	1838.7	40.7
0°-60°	3538.0	78.3
0°-90°	4517.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4517.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	443	509	614	748	805	41
15°	364	726	1500	1678	1748	102
25°	268	980	1656	1728	1746	123
35°	191	947	1568	1621	1717	120
45°	138	726	1373	1574	1649	107
55°	103	432	1164	1338	1373	93
65°	81	243	857	960	978	80
75°	57	149	456	246	250	59
85°	20	44	55	37	33	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	456.1	456.1	456.1	456.1	456.1
2.5°	451.7	475.9	502.2	532.9	546.0
5°	443.0	508.8	614.0	747.8	804.8
7.5°	429.8	550.4	822.4	1193.0	1320.2
10°	410.1	596.5	1175.4	1486.8	1548.2
12.5°	388.2	657.9	1396.9	1592.1	1655.7
15°	364.0	725.9	1500.0	1677.6	1747.8
17.5°	339.9	800.4	1559.2	1741.2	1782.9
20°	313.6	879.4	1605.2	1756.6	1780.7
22.5°	289.5	938.6	1638.1	1743.4	1769.7
25°	267.5	980.3	1655.7	1728.0	1745.6
27.5°	245.6	995.6	1649.1	1699.5	1714.9
30°	225.9	991.2	1629.4	1664.5	1688.6
32.5°	208.3	978.1	1600.9	1633.8	1693.0
35°	190.8	947.4	1568.0	1620.6	1717.1
37.5°	175.4	903.5	1526.3	1627.2	1723.7
40°	162.3	853.1	1480.2	1627.2	1706.1
42.5°	149.1	793.8	1427.6	1605.2	1684.2
45°	138.2	725.9	1372.8	1574.5	1649.1
47.5°	127.2	651.3	1322.4	1537.3	1594.3
50°	118.4	574.6	1271.9	1482.4	1526.3
52.5°	109.6	500.0	1221.5	1416.6	1456.1
55°	103.1	432.0	1164.5	1337.7	1372.8
57.5°	96.5	370.6	1103.1	1254.4	1282.9
60°	92.1	322.4	1028.5	1162.3	1190.8
62.5°	85.5	278.5	945.2	1065.8	1092.1
65°	81.1	243.4	857.4	960.5	978.1
67.5°	74.6	214.9	765.3	839.9	822.4
70°	68.0	195.2	671.0	693.0	598.7
72.5°	63.6	173.2	568.0	502.2	302.6
75°	57.0	149.1	456.1	245.6	250.0
77.5°	48.2	120.6	335.5	197.4	201.8
80°	39.5	94.3	157.9	153.5	155.7
82.5°	30.7	68.0	96.5	103.1	98.7
85°	19.7	43.9	54.8	37.3	32.9
87.5°	8.8	19.7	11.0	11.0	11.0
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	17.83	19.52	18.20	19.83	20.15	26.49	28.17	26.85	28.49	28.80
	3H	18.62	20.15	19.00	20.47	20.83	28.17	29.70	28.55	30.02	30.38
	4H	18.96	20.39	19.35	20.74	21.11	28.39	29.82	28.79	30.17	30.55
	6H	19.21	20.54	19.62	20.91	21.30	28.52	29.85	28.93	30.21	30.60
	8H	19.29	20.56	19.72	20.95	21.35	28.54	29.82	28.97	30.20	30.60
	12H	19.35	20.56	19.78	20.95	21.37	28.54	29.76	28.97	30.14	30.57
4H	2H	22.27	23.70	22.67	24.05	24.42	27.03	28.46	27.42	28.81	29.18
	3H	23.28	24.48	23.69	24.88	25.28	28.93	30.13	29.34	30.53	30.93
	4H	23.60	24.69	24.04	25.10	25.54	29.21	30.29	29.64	30.70	31.14
	6H	23.79	24.73	24.24	25.17	25.63	29.40	30.35	29.85	30.78	31.24
	8H	23.83	24.71	24.29	25.15	25.62	29.45	30.33	29.90	30.77	31.24
	12H	23.86	24.65	24.34	25.13	25.60	29.46	30.25	29.94	30.73	31.20
8H	4H	24.84	25.73	25.30	26.17	26.63	29.39	30.28	29.85	30.72	31.18
	6H	25.12	25.85	25.61	26.34	26.81	29.64	30.37	30.13	30.86	31.33
	8H	25.20	25.86	25.71	26.36	26.85	29.71	30.36	30.22	30.87	31.35
	12H	25.27	25.85	25.78	26.34	26.90	29.74	30.32	30.25	30.81	31.37
12H	4H	24.90	25.69	25.38	26.17	26.64	29.39	30.18	29.86	30.65	31.12
	6H	25.22	25.88	25.73	26.38	26.87	29.63	30.29	30.14	30.79	31.28
	8H	25.37	25.95	25.87	26.44	27.00	29.74	30.31	30.24	30.80	31.36