

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: P845523

Luminaire Tested: SQ2R-FB-075D-830-UNV-STD-W-4

Issue Date: 6/14/2024

**Test Information**

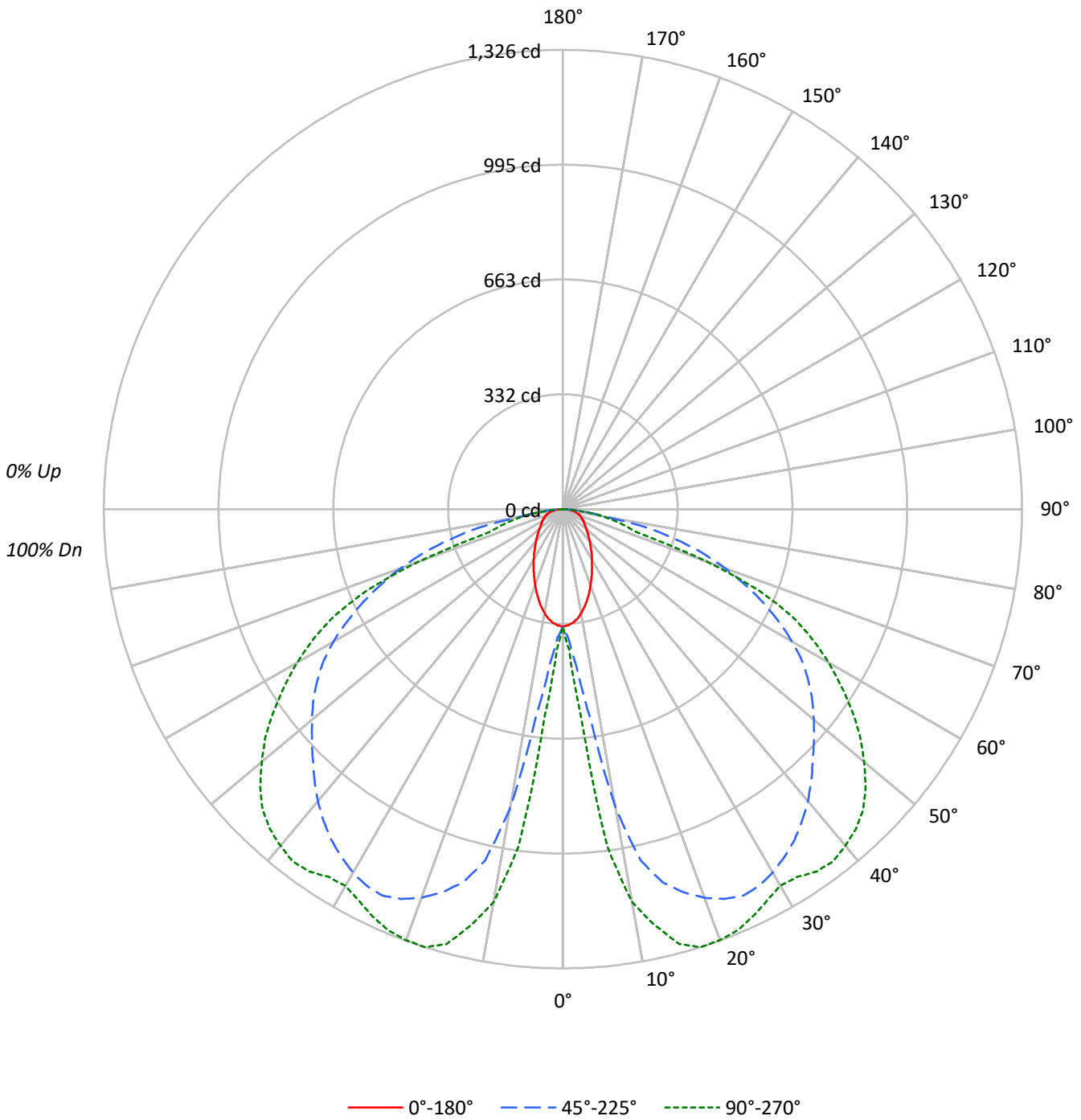
Test Method: LM-79-2019  
Report Number: P845523  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/14/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2R-FB-075D-830-UNV-STD-W-4  
Description: CONTINUA SQ2 RECESSED, BATWING LENS  
750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3359.5 lumens  
Efficiency: N/A  
Efficacy: 125.8 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): 26.7  
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

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5478	5478	5478
5°	5340	7402	9702
10°	5000	14332	18879
15°	4527	18648	21728
20°	4007	20514	22756
25°	3545	21937	23129
30°	3132	22594	23415
35°	2797	22986	25172
40°	2544	23206	26747
45°	2347	23313	28005
50°	2213	23762	28514
55°	2159	24380	28741
60°	2212	24703	28601
65°	2304	24363	27790
70°	2389	23561	21021
75°	2645	21166	11597
80°	2734	10916	10767
85°	2723	7558	4539

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 55°  
 Luminance: 28741 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.9	1.7
10°-20°	260.4	7.8
20°-30°	458.4	13.6
30°-40°	592.9	17.6
40°-50°	653.9	19.5
50°-60°	610.0	18.2
60°-70°	472.0	14.1
70°-80°	215.8	6.4
80°-90°	40.3	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°	774.7	23.1
0°-40°	1367.5	40.7
0°-60°	2631.4	78.3
0°-90°	3359.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3359.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	339	339	339	339	339	
5°	330	378	457	556	599	31
15°	271	540	1116	1248	1300	76
25°	199	729	1231	1285	1298	91
35°	142	705	1166	1205	1277	89
45°	103	540	1021	1171	1226	80
55°	77	321	866	995	1021	69
65°	60	181	638	714	727	59
75°	42	111	339	183	186	44
85°	15	33	41	28	24	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	339.3	339.3	339.3	339.3	339.3
2.5°	336.0	353.9	373.5	396.3	406.1
5°	329.5	378.4	456.7	556.2	598.6
7.5°	319.7	409.4	611.6	887.3	981.9
10°	305.0	443.6	874.2	1105.8	1151.5
12.5°	288.7	489.3	1039.0	1184.1	1231.4
15°	270.8	539.9	1115.6	1247.7	1299.9
17.5°	252.8	595.3	1159.7	1295.0	1326.0
20°	233.2	654.0	1193.9	1306.5	1324.4
22.5°	215.3	698.1	1218.4	1296.7	1316.3
25°	199.0	729.1	1231.4	1285.3	1298.3
27.5°	182.7	740.5	1226.5	1264.1	1275.5
30°	168.0	737.2	1211.9	1238.0	1255.9
32.5°	154.9	727.4	1190.7	1215.1	1259.2
35°	141.9	704.6	1166.2	1205.3	1277.1
37.5°	130.5	672.0	1135.2	1210.2	1282.0
40°	120.7	634.5	1101.0	1210.2	1269.0
42.5°	110.9	590.4	1061.8	1193.9	1252.6
45°	102.8	539.9	1021.0	1171.1	1226.5
47.5°	94.6	484.4	983.5	1143.4	1185.8
50°	88.1	427.3	946.0	1102.6	1135.2
52.5°	81.6	371.9	908.5	1053.7	1083.0
55°	76.7	321.3	866.1	994.9	1021.0
57.5°	71.8	275.6	820.4	933.0	954.2
60°	68.5	239.8	765.0	864.5	885.7
62.5°	63.6	207.1	703.0	792.7	812.3
65°	60.3	181.0	637.7	714.4	727.4
67.5°	55.5	159.8	569.2	624.7	611.6
70°	50.6	145.2	499.1	515.4	445.3
72.5°	47.3	128.9	422.4	373.5	225.1
75°	42.4	110.9	339.3	182.7	185.9
77.5°	35.9	89.7	249.5	146.8	150.1
80°	29.4	70.1	117.4	114.2	115.8
82.5°	22.8	50.6	71.8	76.7	73.4
85°	14.7	32.6	40.8	27.7	24.5
87.5°	6.5	14.7	8.2	8.2	8.2
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	16.80	18.49	17.17	18.80	19.12	25.46	27.14	25.82	27.46	27.77
	3H	17.59	19.12	17.97	19.44	19.80	27.14	28.67	27.52	28.99	29.35
	4H	17.93	19.36	18.33	19.71	20.08	27.36	28.80	27.76	29.14	29.52
	6H	18.18	19.51	18.59	19.88	20.27	27.49	28.82	27.90	29.18	29.57
	8H	18.26	19.53	18.69	19.92	20.32	27.52	28.79	27.94	29.18	29.57
	12H	18.32	19.54	18.75	19.92	20.35	27.52	28.73	27.94	29.11	29.54
4H	2H	21.24	22.67	21.64	23.02	23.40	26.00	27.43	26.40	27.78	28.15
	3H	22.25	23.46	22.66	23.85	24.25	27.90	29.10	28.31	29.50	29.90
	4H	22.58	23.66	23.01	24.07	24.51	28.18	29.26	28.61	29.67	30.11
	6H	22.76	23.70	23.21	24.14	24.60	28.37	29.32	28.82	29.76	30.21
	8H	22.80	23.68	23.26	24.13	24.59	28.42	29.30	28.88	29.74	30.21
	12H	22.83	23.63	23.31	24.10	24.57	28.43	29.22	28.91	29.70	30.17
8H	4H	23.81	24.70	24.27	25.14	25.60	28.36	29.25	28.82	29.69	30.15
	6H	24.09	24.82	24.58	25.31	25.78	28.61	29.34	29.10	29.83	30.30
	8H	24.17	24.83	24.68	25.33	25.82	28.68	29.33	29.19	29.84	30.33
	12H	24.24	24.82	24.75	25.31	25.87	28.71	29.29	29.22	29.78	30.34
12H	4H	23.87	24.66	24.35	25.14	25.61	28.36	29.15	28.84	29.63	30.09
	6H	24.19	24.85	24.70	25.36	25.84	28.60	29.26	29.11	29.76	30.25
	8H	24.34	24.92	24.85	25.41	25.97	28.71	29.29	29.21	29.78	30.34