

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: P845619

Luminaire Tested: SQ2R-PR1-075D-830-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845619
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PR1-075D-830-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

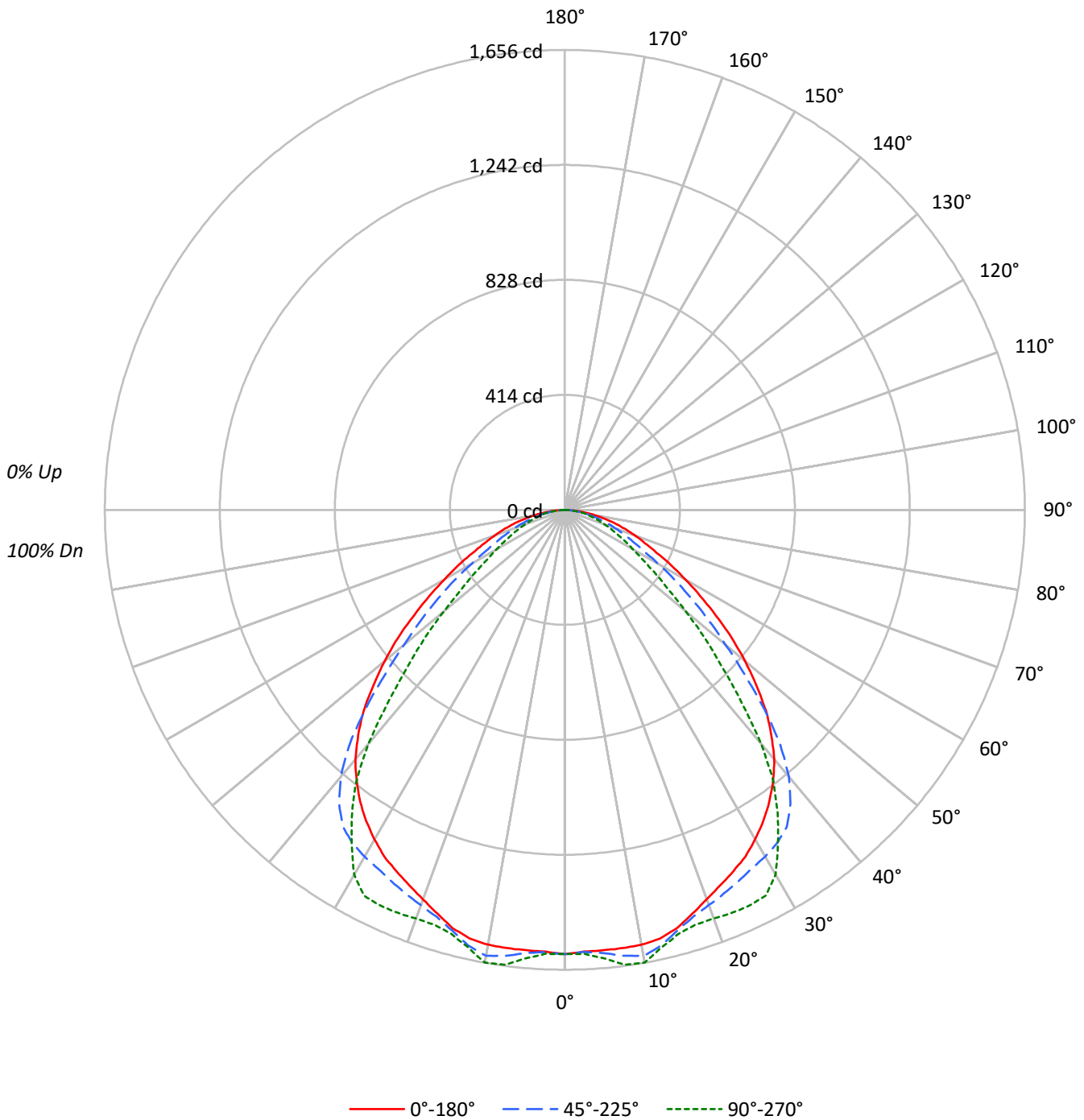
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3849.5 lumens
Efficiency: N/A
Efficacy: 144.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.33 / 1.36
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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65			65	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56			56	
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50	
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44			44	
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39			39	
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35			35	
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32	
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29			29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25835	25835	25835
5°	25801	25960	26277
10°	26073	26740	27142
15°	26064	26200	26419
20°	25642	26034	26904
25°	25570	26297	28010
30°	25544	26880	28280
35°	25300	27455	26329
40°	24717	26437	23170
45°	23389	23201	18324
50°	21263	18969	14217
55°	18686	15612	11066
60°	16168	12484	9113
65°	13960	10346	7977
70°	12552	9163	7086
75°	11497	7935	6513
80°	10005	6369	6369
85°	7243	5743	3020

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 25325 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	4.0
10°-20°	447.5	11.6
20°-30°	692.0	18.0
30°-40°	833.2	21.6
40°-50°	748.0	19.4
50°-60°	499.3	13.0
60°-70°	290.1	7.5
70°-80°	149.1	3.9
80°-90°	35.9	0.9
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°	1293.9	33.6
0°-40°	2127.1	55.3
0°-60°	3374.5	87.7
0°-90°	3849.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3849.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1592	1620	1602	1605	1621	152
15°	1559	1624	1567	1572	1580	438
25°	1435	1494	1476	1530	1572	662
35°	1284	1295	1393	1367	1336	801
45°	1024	1109	1016	858	802	784
55°	664	690	555	429	393	596
65°	365	374	271	220	209	368
75°	184	179	127	108	104	195
85°	39	31	31	21	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1600.1	1600.1	1600.1	1600.1	1600.1
2.5°	1591.9	1616.4	1593.5	1595.2	1600.1
5°	1591.9	1619.6	1601.7	1604.9	1621.3
7.5°	1591.9	1629.4	1619.6	1631.0	1652.2
10°	1590.3	1637.6	1631.0	1632.7	1655.5
12.5°	1580.5	1637.6	1606.6	1603.3	1613.1
15°	1559.3	1624.5	1567.4	1572.3	1580.5
17.5°	1525.0	1593.5	1536.4	1552.8	1565.8
20°	1492.4	1559.3	1515.2	1538.1	1565.8
22.5°	1463.0	1529.9	1495.7	1529.9	1570.7
25°	1435.3	1494.0	1476.1	1529.9	1572.3
27.5°	1407.6	1445.1	1456.5	1531.5	1565.8
30°	1370.1	1392.9	1441.8	1505.5	1516.9
32.5°	1329.3	1340.7	1422.3	1448.4	1427.2
35°	1283.6	1295.0	1392.9	1366.8	1335.8
37.5°	1231.4	1251.0	1334.2	1267.3	1233.1
40°	1172.7	1211.9	1254.3	1140.1	1099.3
42.5°	1101.0	1169.5	1148.3	994.9	942.7
45°	1024.3	1109.1	1016.1	857.9	802.5
47.5°	934.6	1025.9	877.5	734.0	683.4
50°	846.5	916.6	755.2	623.1	566.0
52.5°	756.8	802.5	650.8	518.7	468.1
55°	663.8	689.9	554.6	429.0	393.1
57.5°	577.4	595.3	469.7	357.2	329.5
60°	500.7	512.1	386.6	303.4	282.2
62.5°	430.6	438.8	319.7	257.7	243.0
65°	365.4	373.5	270.8	220.2	208.8
67.5°	311.5	316.4	230.0	189.2	177.8
70°	265.9	267.5	194.1	158.2	150.1
72.5°	225.1	221.8	159.8	132.1	127.2
75°	184.3	179.4	127.2	107.6	104.4
77.5°	145.2	140.3	94.6	86.4	86.4
80°	107.6	101.1	68.5	68.5	68.5
82.5°	73.4	63.6	48.9	48.9	47.3
85°	39.1	31.0	31.0	21.2	16.3
87.5°	13.0	13.0	4.9	4.9	4.9
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	22.00	23.50	22.37	23.81	24.13	18.73	20.23	19.10	20.54	20.86
	3H	23.28	24.62	23.66	24.95	25.31	19.85	21.18	20.22	21.51	21.87
	4H	23.76	25.02	24.16	25.36	25.74	20.27	21.52	20.67	21.87	22.25
	6H	24.11	25.26	24.52	25.63	26.02	20.63	21.79	21.05	22.16	22.55
	8H	24.21	25.31	24.64	25.70	26.10	20.74	21.83	21.16	22.22	22.63
	12H	24.26	25.31	24.69	25.69	26.12	20.76	21.81	21.19	22.20	22.63
4H	2H	22.16	23.41	22.56	23.76	24.14	19.38	20.63	19.78	20.98	21.36
	3H	23.68	24.72	24.10	25.12	25.52	20.70	21.73	21.11	22.13	22.53
	4H	24.30	25.23	24.73	25.65	26.08	21.23	22.15	21.66	22.57	23.01
	6H	24.79	25.59	25.24	26.03	26.49	21.69	22.50	22.15	22.94	23.40
	8H	24.93	25.68	25.39	26.12	26.59	21.83	22.58	22.29	23.02	23.49
	12H	25.01	25.68	25.49	26.16	26.63	21.88	22.55	22.36	23.03	23.50
8H	4H	24.37	25.12	24.83	25.57	26.03	21.57	22.33	22.04	22.77	23.24
	6H	24.94	25.56	25.44	26.05	26.53	22.13	22.75	22.63	23.24	23.72
	8H	25.13	25.69	25.65	26.20	26.69	22.31	22.87	22.83	23.38	23.87
	12H	25.26	25.76	25.77	26.25	26.82	22.40	22.90	22.91	23.39	23.96
12H	4H	24.36	25.03	24.84	25.51	25.98	21.62	22.29	22.10	22.77	23.24
	6H	24.92	25.48	25.44	25.99	26.48	22.19	22.75	22.70	23.26	23.75
	8H	25.16	25.66	25.67	26.15	26.71	22.42	22.92	22.93	23.41	23.97