

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521741

Luminaire Tested: **SQ4-WB-025U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521741
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

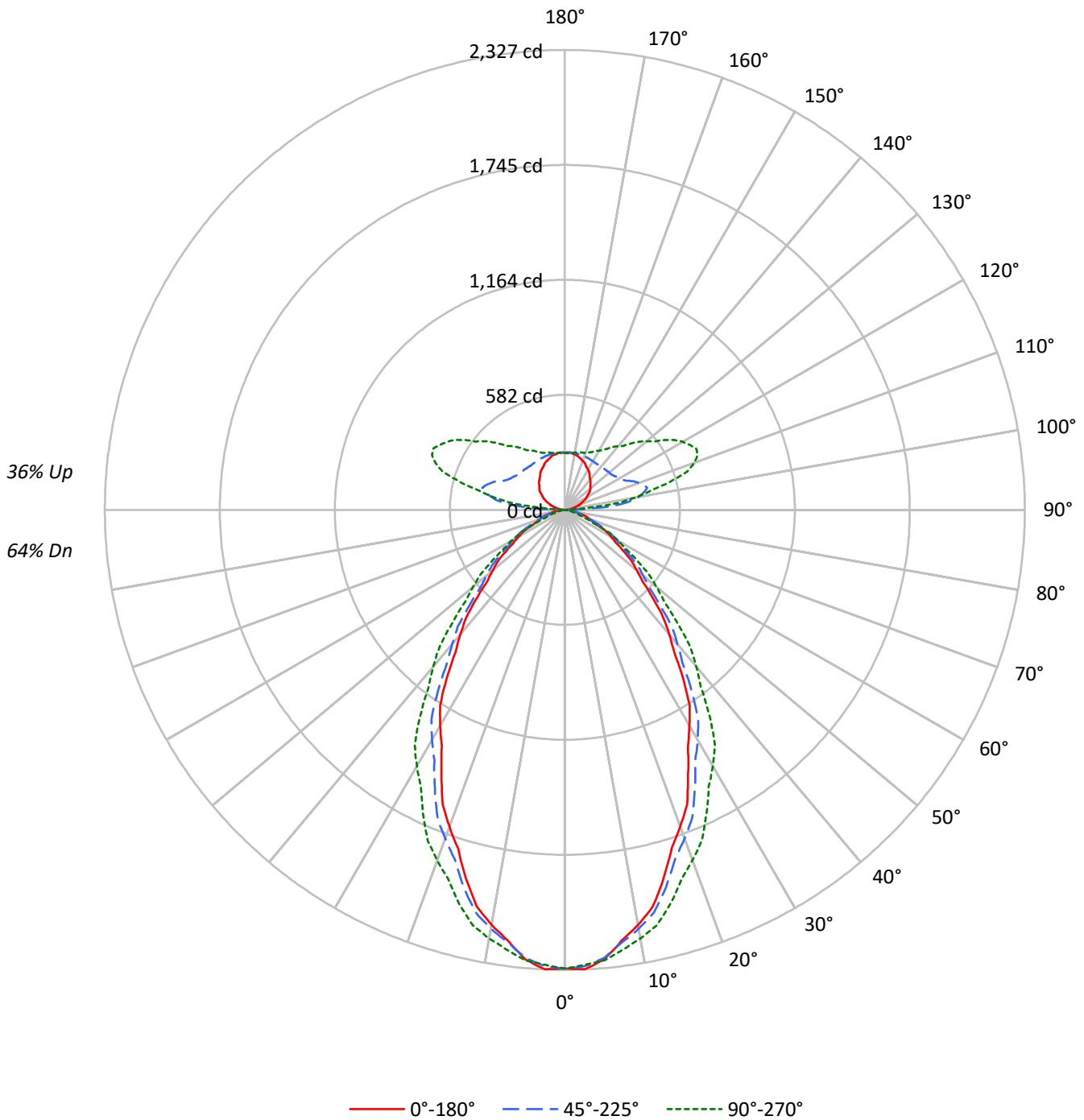
Lumens per Lamp: N/A
Luminaire Lumens: 5250.5 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 56.7
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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64	64	64	64	
1	102	99	95	92	96	93	90	87	82	80	78	73	71	70	64	62	61	57	57	57	57	
2	95	88	82	78	89	83	78	74	74	70	67	66	63	61	58	56	54	50	50	50	50	
3	87	79	72	67	82	75	69	64	67	62	58	59	56	53	53	50	48	45	45	45	45	
4	81	71	64	58	76	67	61	56	60	55	51	54	50	47	48	45	43	40	40	40	40	
5	75	64	57	51	70	61	54	49	55	50	45	49	45	42	44	41	38	36	36	36	36	
6	70	58	51	45	66	56	49	44	50	45	41	45	41	38	41	37	35	32	32	32	32	
7	65	53	46	41	61	51	44	39	46	41	37	42	37	34	38	34	32	29	29	29	29	
8	61	49	42	37	57	47	40	35	43	37	33	39	34	31	35	32	29	27	27	27	27	
9	57	45	38	33	54	43	37	32	40	34	30	36	32	28	33	29	26	25	25	25	25	
10	53	42	35	30	51	40	34	30	37	31	28	34	29	26	31	27	24	23	23	23	23	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21415	21415	21415
5°	21148	21072	21195
10°	19980	20161	20629
15°	18444	18872	19718
20°	16749	17379	18529
25°	15023	15842	17262
30°	13433	14311	15949
35°	11746	12596	14397
40°	9887	10672	12463
45°	8159	8863	10406
50°	6812	7426	8668
55°	5783	6373	7160
60°	4943	5525	5713
65°	3936	4648	3692
70°	3488	3626	2252
75°	3230	2941	1380
80°	2975	2704	1190
85°	2699	2477	974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.9	4.1
10°-20°	553.8	10.5
20°-30°	717.3	13.7
30°-40°	702.4	13.4
40°-50°	537.6	10.2
50°-60°	358.3	6.8
60°-70°	195.5	3.7
70°-80°	81.5	1.6
80°-90°	23.1	0.4
90°-100°	148.7	2.8
100°-110°	359.5	6.8
110°-120°	383.4	7.3
120°-130°	310.5	5.9
130°-140°	240.4	4.6
140°-150°	183.4	3.5
150°-160°	132.8	2.5
160°-170°	81.8	1.6
170°-180°	27.7	0.5
0°-30°	1483.9	28.3
0°-40°	2186.3	41.6
0°-60°	3082.2	58.7
0°-90°	3382.2	64.4
90°-120°	891.6	17.0
90°-150°	1626.0	31.0
90°-180°	1868.0	35.6
0°-180°	5250.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2321	2321	2321	2321	2321	
5°	2283	2260	2275	2280	2288	212
15°	1931	1924	1976	2030	2064	539
25°	1476	1480	1556	1624	1696	679
35°	1043	1048	1118	1194	1278	648
45°	625	637	679	731	798	488
55°	360	374	396	411	445	326
65°	180	195	213	186	169	187
75°	91	91	82	57	39	97
85°	26	26	23	15	9	28
90°	0	0	0	0	0	2
95°	15	74	255	166	116	16
105°	57	99	432	559	552	61
115°	105	134	347	658	734	104
125°	150	172	301	523	615	134
135°	184	206	289	413	475	142
145°	218	234	284	351	378	136
155°	249	260	287	311	322	115
165°	276	280	291	295	300	78
175°	292	290	292	289	288	28
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2321.1	2321.1	2321.1	2321.1	2321.1
2.5°	2326.8	2306.1	2311.3	2311.1	2304.8
5°	2283.4	2260.5	2275.2	2280.5	2288.5
7.5°	2198.7	2181.3	2208.2	2228.1	2244.3
10°	2132.7	2117.7	2152.0	2181.0	2201.9
12.5°	2056.1	2043.5	2086.0	2124.9	2152.2
15°	1931.0	1924.0	1975.8	2029.6	2064.4
17.5°	1797.2	1793.8	1853.2	1915.9	1960.5
20°	1705.9	1704.9	1770.1	1835.4	1887.2
22.5°	1613.9	1616.0	1684.5	1752.5	1811.4
25°	1475.7	1479.7	1556.2	1624.0	1695.7
27.5°	1348.0	1349.8	1428.9	1500.5	1577.0
30°	1260.9	1265.8	1343.3	1417.5	1497.1
32.5°	1173.7	1179.4	1255.4	1332.0	1413.2
35°	1042.9	1047.9	1118.3	1193.5	1278.2
37.5°	908.1	914.8	977.3	1048.5	1131.7
40°	820.9	830.8	886.1	953.1	1034.8
42.5°	737.0	749.3	800.5	864.1	937.8
45°	625.3	637.3	679.3	730.7	797.5
47.5°	529.2	542.9	575.2	619.5	676.5
50°	474.6	487.5	517.4	550.2	603.9
52.5°	426.5	439.5	466.0	491.3	537.1
55°	359.5	374.5	396.2	411.2	445.1
57.5°	304.5	318.9	336.1	342.9	363.4
60°	267.9	283.8	299.4	298.7	309.6
62.5°	234.4	248.0	263.6	252.8	253.4
65°	180.3	195.2	212.9	186.0	169.1
67.5°	145.6	148.8	167.0	129.7	109.6
70°	129.3	129.3	134.4	100.4	83.5
72.5°	113.9	113.9	109.2	81.7	64.0
75°	90.6	90.6	82.5	56.6	38.7
77.5°	69.9	69.1	63.1	42.3	28.1
80°	56.0	56.0	50.9	33.4	22.4
82.5°	43.8	43.8	39.5	26.1	16.7
85°	25.5	25.5	23.4	15.1	9.2
87.5°	9.0	9.0	8.1	4.9	4.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	40.3	94.8	46.1	31.3
95°	14.7	74.4	254.8	165.7	116.1
97.5°	26.0	82.4	335.6	323.3	277.6
100°	34.8	87.4	380.1	401.3	363.6
102.5°	43.1	91.9	409.5	466.1	443.8
105°	57.4	99.3	432.1	559.0	551.8
107.5°	71.5	108.0	418.7	633.5	650.4
110°	81.3	115.3	397.2	665.6	697.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>91.1</i>	122.7	378.2	673.5	727.6
115°	<i>105.1</i>	134.4	347.1	658.1	734.0
117.5°	<i>119.0</i>	146.7	328.9	622.7	711.6
120°	<i>128.3</i>	154.0	317.2	594.9	688.1
122.5°	<i>138.1</i>	161.9	309.8	566.5	658.3
125°	<i>149.7</i>	172.4	301.3	523.4	614.8
127.5°	<i>161.2</i>	182.6	295.3	486.8	567.1
130°	<i>168.1</i>	189.0	293.3	461.4	540.2
132.5°	<i>174.4</i>	196.3	290.4	443.0	509.9
135°	<i>183.9</i>	205.5	289.1	412.7	474.8
137.5°	<i>193.0</i>	214.6	284.8	392.2	439.0
140°	<i>199.8</i>	219.6	284.8	377.4	420.5
142.5°	<i>206.7</i>	226.4	282.3	364.6	400.9
145°	<i>217.6</i>	233.7	283.6	350.8	378.3
147.5°	<i>227.7</i>	243.4	282.8	334.9	357.6
150°	<i>234.1</i>	247.8	284.8	328.0	345.9
152.5°	<i>240.9</i>	254.2	284.3	320.6	336.6
155°	<i>249.3</i>	260.1	287.2	310.7	322.1
157.5°	<i>259.5</i>	268.7	286.6	306.9	313.6
160°	<i>263.4</i>	271.2	289.1	302.0	306.8
162.5°	<i>269.8</i>	276.6	288.1	300.5	303.4
165°	<i>275.6</i>	279.8	290.9	295.3	299.5
167.5°	<i>282.8</i>	285.6	290.2	294.9	295.1
170°	<i>284.8</i>	286.6	292.1	291.6	294.6
172.5°	<i>288.2</i>	289.5	290.7	292.0	290.2
175°	<i>291.5</i>	290.3	291.5	289.0	288.5
177.5°	<i>290.9</i>	290.9	289.9	288.9	286.5
180°	<i>288.5</i>	288.5	288.5	288.5	288.5

(END OF REPORT)