

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
(formerly Eaton)

Brand: CORELITE

Report Number: P520324

Luminaire Tested: **SQ4-F-125U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520324
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-125U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

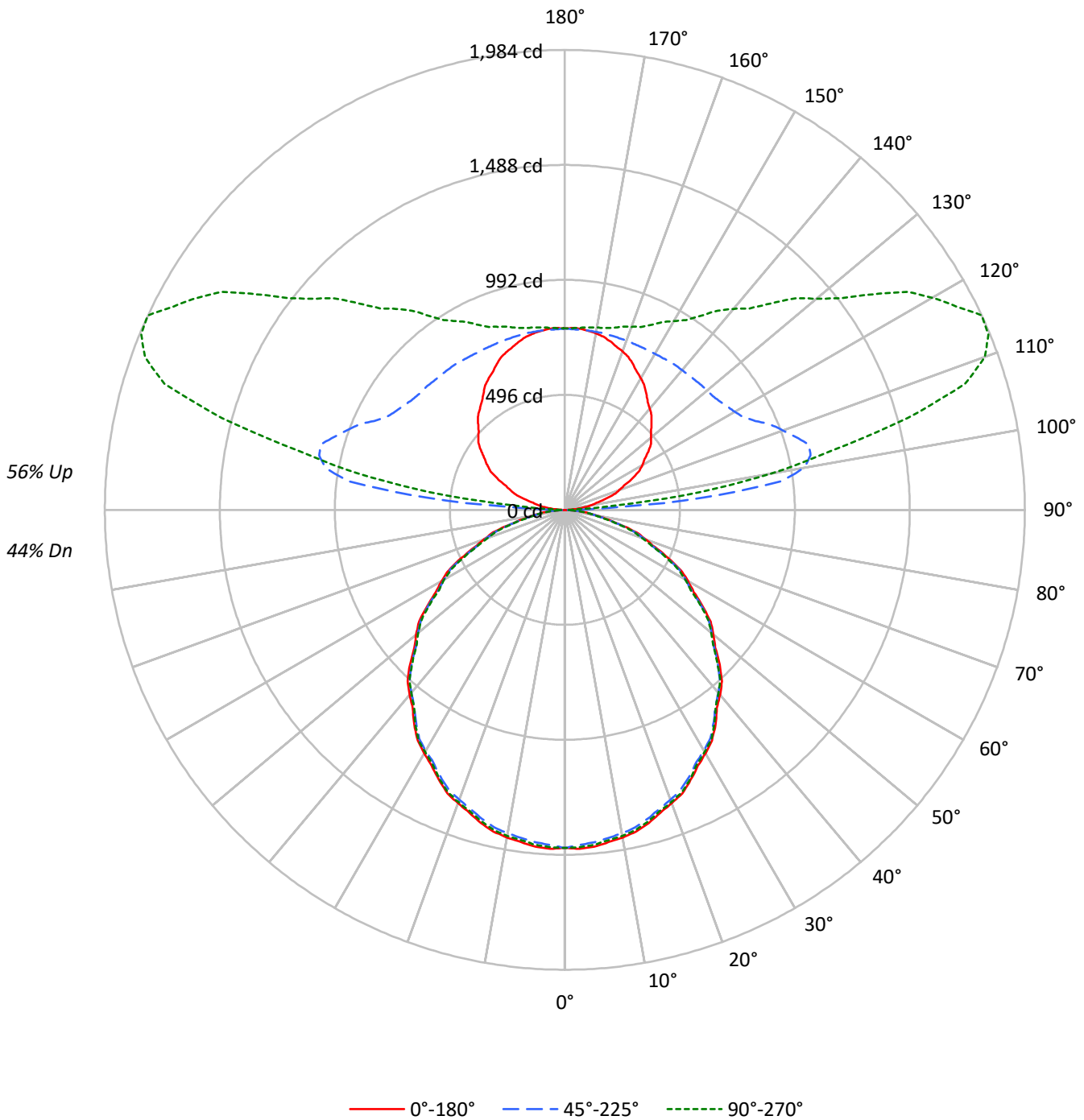
Lumens per Lamp: N/A
Luminaire Lumens: 9028.5 lumens
Efficiency: N/A
Efficacy: 140.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 64.5
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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30	26
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13454	13454	13454
5°	13514	13329	13431
10°	13445	13276	13380
15°	13364	13182	13287
20°	13225	13069	13177
25°	13081	12929	13030
30°	12923	12784	12847
35°	12760	12602	12670
40°	12547	12404	12416
45°	12326	12158	12118
50°	12010	11865	11837
55°	11655	11527	11446
60°	11302	11097	11060
65°	10750	10507	10422
70°	9989	9746	9557
75°	8919	8634	8456
80°	7337	7072	6753
85°	4340	4774	4880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	1.5
10°-20°	391.9	4.3
20°-30°	588.6	6.5
30°-40°	702.4	7.8
40°-50°	719.9	8.0
50°-60°	641.1	7.1
60°-70°	477.9	5.3
70°-80°	258.8	2.9
80°-90°	60.7	0.7
90°-100°	365.9	4.1
100°-110°	985.7	10.9
110°-120°	1034.5	11.5
120°-130°	839.4	9.3
130°-140°	658.4	7.3
140°-150°	505.4	5.6
150°-160°	363.4	4.0
160°-170°	222.0	2.5
170°-180°	74.9	0.8
0°-30°	1118.1	12.4
0°-40°	1820.5	20.2
0°-60°	3181.5	35.2
0°-90°	3978.9	44.1
90°-120°	2386.1	26.4
90°-150°	4389.3	48.6
90°-180°	5050.0	55.9
0°-180°	9028.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1459	1456	1439	1452	1450	138
15°	1399	1394	1380	1391	1391	394
25°	1285	1282	1270	1277	1280	592
35°	1133	1128	1119	1121	1125	707
45°	945	940	932	927	929	727
55°	725	726	717	710	712	649
65°	492	490	481	476	477	487
75°	250	247	242	237	237	266
85°	41	45	45	46	46	57
90°	2	6	12	13	13	5
95°	56	199	600	307	212	58
105°	182	284	1090	1631	1530	192
115°	322	394	908	1754	1984	317
125°	439	505	815	1378	1621	392
135°	529	590	792	1111	1259	408
145°	612	660	782	950	1020	384
155°	694	720	775	853	880	320
165°	753	762	778	809	813	212
175°	783	782	779	790	788	74
180°	782	782	782	782	782	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1458.2	1458.2	1458.2	1458.2	1458.2
2.5°	1463.7	1460.7	1447.8	1458.1	1456.5
5°	1459.2	1456.2	1439.2	1452.1	1450.2
7.5°	1445.5	1442.6	1427.6	1439.5	1437.8
10°	1435.1	1432.2	1417.1	1429.1	1428.2
12.5°	1421.5	1418.6	1403.5	1415.5	1414.5
15°	1399.1	1394.2	1380.1	1391.1	1391.1
17.5°	1369.5	1365.7	1352.7	1361.9	1362.1
20°	1347.0	1344.1	1331.1	1341.1	1342.1
22.5°	1324.6	1321.8	1307.0	1316.3	1318.1
25°	1285.0	1282.1	1270.0	1277.1	1280.0
27.5°	1244.2	1239.9	1227.9	1234.3	1236.3
30°	1213.0	1211.0	1200.0	1203.1	1205.9
32.5°	1180.2	1178.2	1168.8	1170.3	1175.5
35°	1132.9	1128.1	1118.9	1121.0	1124.9
37.5°	1077.0	1074.7	1065.8	1064.7	1068.4
40°	1041.8	1037.9	1029.9	1027.9	1030.9
42.5°	1003.4	999.4	989.8	987.9	991.6
45°	944.7	939.9	931.8	926.8	928.7
47.5°	879.1	879.1	870.7	865.0	867.9
50°	836.7	836.7	826.6	821.7	824.7
52.5°	792.7	793.5	782.7	780.0	779.0
55°	724.6	725.6	716.6	709.6	711.6
57.5°	658.9	656.8	646.3	641.8	642.7
60°	612.5	609.6	601.4	594.6	599.4
62.5°	565.3	563.9	555.9	548.0	547.4
65°	492.4	490.5	481.3	476.4	477.4
67.5°	419.9	417.6	409.3	402.2	404.8
70°	370.3	370.3	361.3	357.2	354.3
72.5°	324.7	320.7	314.1	308.4	306.3
75°	250.2	247.3	242.2	237.2	237.2
77.5°	182.1	179.6	176.4	172.9	171.9
80°	138.1	137.1	133.1	132.0	127.1
82.5°	97.3	97.1	94.7	92.0	91.8
85°	41.0	45.0	45.1	46.1	46.1
87.5°	7.6	13.1	13.6	12.2	12.2
90°	2.0	5.9	11.9	12.9	12.9
92.5°	24.3	85.8	169.8	81.7	56.8
95°	55.8	199.0	599.8	306.8	212.2
97.5°	89.1	227.8	940.8	786.0	592.7
100°	114.6	239.3	1049.3	1097.8	910.7
102.5°	139.3	255.5	1085.1	1331.4	1177.8
105°	182.3	283.7	1090.1	1630.9	1530.5
107.5°	223.0	313.4	1043.6	1784.9	1810.7
110°	250.1	335.9	1001.4	1832.6	1927.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	278.8	358.3	960.8	1822.1	1977.4
115°	321.9	394.0	907.8	1754.0	1983.9
117.5°	361.1	428.7	866.7	1645.3	1901.4
120°	386.6	451.9	846.0	1567.4	1830.5
122.5°	408.9	473.4	830.8	1487.7	1749.9
125°	439.4	504.7	815.1	1377.7	1621.2
127.5°	468.7	533.0	805.2	1280.6	1498.0
130°	486.3	550.6	801.1	1225.0	1415.9
132.5°	503.8	567.4	797.2	1176.0	1351.4
135°	529.1	590.5	792.1	1111.4	1258.6
137.5°	553.3	612.1	789.6	1056.6	1177.4
140°	569.9	626.5	787.2	1022.8	1132.0
142.5°	587.5	640.1	785.6	991.4	1083.3
145°	611.9	659.5	782.2	950.2	1020.4
147.5°	638.1	679.7	778.8	915.6	970.7
150°	655.7	691.7	777.2	893.9	939.6
152.5°	671.6	702.9	776.4	876.1	913.3
155°	694.5	719.8	775.3	852.6	879.9
157.5°	714.7	734.3	775.5	836.0	854.4
160°	727.4	744.0	776.2	826.4	840.0
162.5°	738.6	752.0	777.0	818.3	828.1
165°	753.4	762.0	778.2	809.2	813.1
167.5°	765.3	770.3	779.2	802.2	803.8
170°	773.3	775.2	779.2	798.2	798.2
172.5°	778.0	778.4	780.0	794.2	794.2
175°	783.3	782.3	779.2	790.2	788.2
177.5°	785.4	783.8	779.8	786.1	784.6
180°	782.2	782.2	782.2	782.2	782.2

(END OF REPORT)