

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: P520013

Luminaire Tested: **SQ4-F-075U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520013
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-075D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

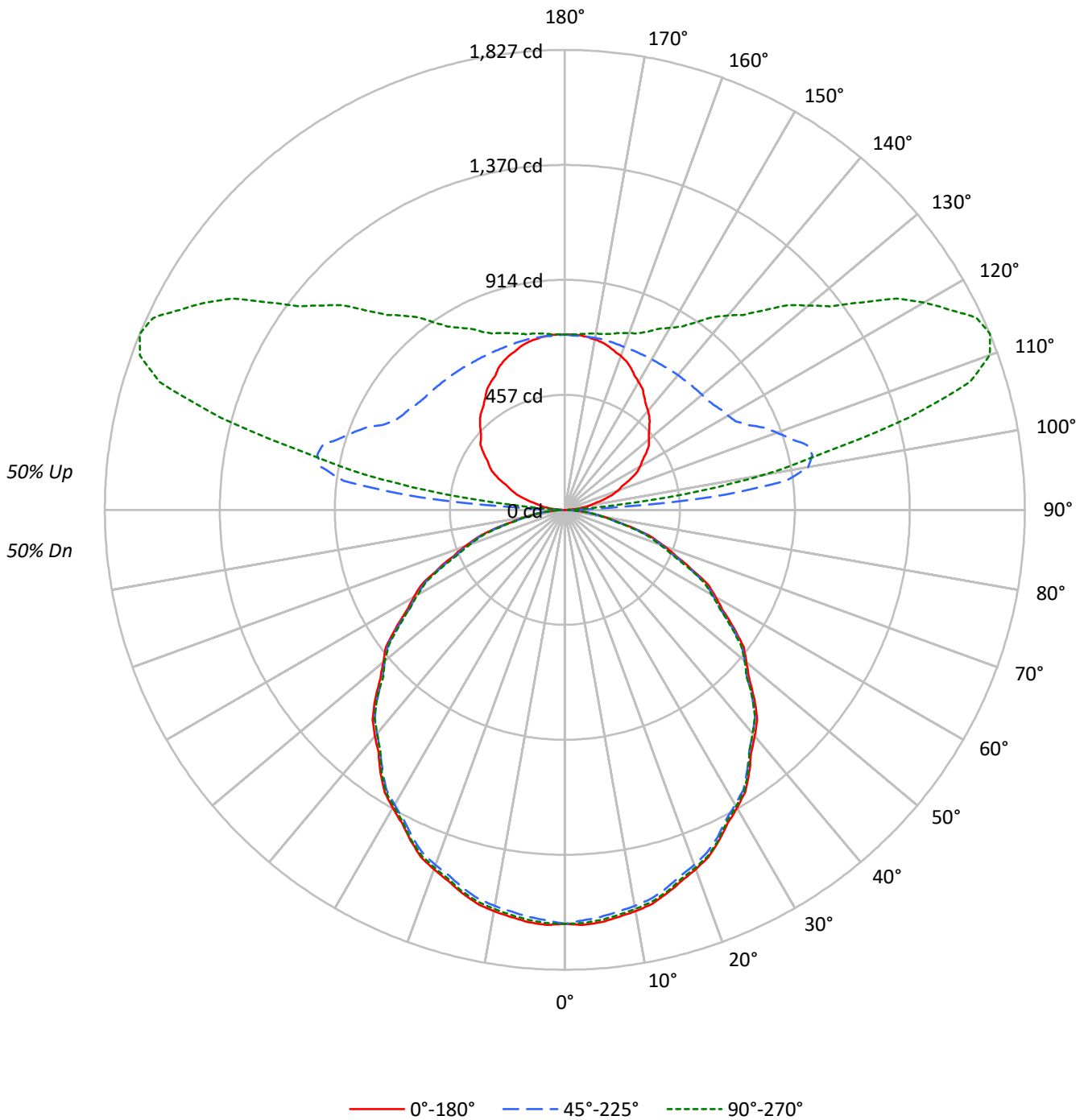
Lumens per Lamp: N/A
Luminaire Lumens: 9027.0 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 66.1
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10116	10116	10116
5°	10154	10025	10099
10°	10113	9982	10057
15°	10036	9912	9997
20°	9945	9827	9905
25°	9835	9734	9805
30°	9710	9604	9658
35°	9583	9482	9527
40°	9422	9326	9313
45°	9260	9143	9169
50°	9002	8931	8931
55°	8793	8682	8601
60°	8510	8364	8290
65°	8050	7898	7789
70°	7562	7375	7185
75°	6804	6554	6412
80°	5441	5334	5281
85°	3268	3684	3783



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.2	1.7
10°-20°	441.9	4.9
20°-30°	663.9	7.4
30°-40°	792.2	8.8
40°-50°	812.4	9.0
50°-60°	723.9	8.0
60°-70°	539.8	6.0
70°-80°	292.7	3.2
80°-90°	69.1	0.8
90°-100°	328.4	3.6
100°-110°	903.5	10.0
110°-120°	932.5	10.3
120°-130°	747.2	8.3
130°-140°	586.8	6.5
140°-150°	449.7	5.0
150°-160°	323.3	3.6
160°-170°	197.7	2.2
170°-180°	66.6	0.7
0°-30°	1261.0	14.0
0°-40°	2053.2	22.7
0°-60°	3589.6	39.8
0°-90°	4491.2	49.8
90°-120°	2164.4	24.0
90°-150°	3948.2	43.7
90°-180°	4536.0	50.2
0°-180°	9027.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1645	1645	1645	1645	1645	
5°	1645	1642	1624	1637	1636	156
15°	1576	1573	1557	1568	1570	444
25°	1449	1448	1434	1442	1445	667
35°	1276	1273	1263	1263	1269	797
45°	1065	1060	1051	1051	1054	819
55°	820	818	810	802	802	732
65°	553	553	543	537	535	551
75°	286	280	276	271	270	301
85°	46	49	52	52	54	64
90°	2	6	10	13	13	4
95°	49	179	581	248	159	52
105°	162	248	996	1516	1415	170
115°	286	348	798	1590	1804	282
125°	394	449	724	1226	1436	352
135°	476	528	704	991	1121	367
145°	550	587	693	844	910	345
155°	622	642	689	759	781	286
165°	673	681	692	720	724	190
175°	696	698	693	702	701	66
180°	696	696	696	696	696	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1644.6	1644.6	1644.6	1644.6	1644.6
2.5°	1650.5	1647.0	1632.6	1644.5	1643.3
5°	1644.6	1641.6	1623.6	1637.0	1635.6
7.5°	1631.1	1627.9	1610.2	1623.6	1623.3
10°	1619.2	1614.7	1598.3	1611.7	1610.2
12.5°	1603.6	1599.3	1582.8	1596.1	1594.7
15°	1576.0	1573.0	1556.6	1568.5	1570.0
17.5°	1544.3	1538.8	1524.0	1535.7	1537.2
20°	1519.3	1514.9	1501.4	1511.8	1513.3
22.5°	1493.0	1488.7	1475.1	1485.6	1487.1
25°	1449.2	1447.8	1434.3	1441.8	1444.7
27.5°	1401.8	1397.7	1386.8	1392.6	1395.5
30°	1367.2	1364.3	1352.3	1356.8	1359.8
32.5°	1331.4	1329.7	1318.9	1321.1	1325.1
35°	1276.2	1273.4	1262.8	1262.9	1268.8
37.5°	1215.1	1211.9	1203.2	1201.7	1204.1
40°	1173.4	1169.0	1161.5	1159.9	1159.9
42.5°	1130.4	1127.2	1117.3	1114.7	1118.2
45°	1064.6	1060.1	1051.1	1051.2	1054.1
47.5°	993.3	991.5	981.0	976.3	977.5
50°	940.8	943.7	933.3	927.5	933.3
52.5°	895.5	893.7	884.5	878.5	880.8
55°	820.0	818.5	809.6	802.1	802.1
57.5°	744.2	740.5	731.2	725.5	730.0
60°	691.8	690.3	679.9	669.6	673.9
62.5°	639.3	636.7	626.2	619.4	622.6
65°	553.1	553.1	542.7	536.7	535.2
67.5°	477.7	470.7	464.9	457.7	455.6
70°	420.5	414.6	410.1	404.0	399.5
72.5°	364.4	360.9	354.0	348.0	347.1
75°	286.3	280.5	275.8	271.3	269.8
77.5°	203.7	202.5	198.3	195.9	196.8
80°	153.6	153.6	150.6	150.6	149.1
82.5°	108.2	109.4	108.8	106.5	106.2
85°	46.3	49.1	52.2	52.3	53.6
87.5°	8.7	15.4	15.3	15.8	15.8
90°	1.5	5.9	10.4	13.3	13.3
92.5°	20.4	87.3	151.4	58.1	47.7
95°	48.9	179.3	580.7	248.3	158.6
97.5°	79.7	198.8	886.2	682.8	481.7
100°	102.2	210.9	982.1	991.3	808.8
102.5°	123.5	225.3	1007.1	1229.9	1062.4
105°	161.5	248.3	995.5	1516.2	1414.8
107.5°	197.6	277.0	938.9	1656.3	1686.5
110°	223.7	296.1	896.3	1691.2	1795.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	247.4	317.5	853.6	1668.7	1827.4
115°	285.9	348.2	798.4	1589.9	1804.3
117.5°	322.7	380.0	763.5	1479.5	1722.0
120°	345.2	400.2	748.1	1396.8	1647.3
122.5°	365.3	420.4	737.4	1324.2	1562.0
125°	394.1	449.1	724.4	1225.5	1435.5
127.5°	421.3	473.7	715.8	1143.1	1327.3
130°	435.6	489.2	711.1	1094.1	1262.2
132.5°	452.1	505.7	707.5	1051.1	1202.9
135°	475.6	527.7	703.7	991.0	1121.4
137.5°	497.5	545.8	700.4	942.5	1050.0
140°	514.0	559.0	699.3	910.3	1007.4
142.5°	528.3	569.7	696.8	881.6	964.7
145°	549.6	587.3	693.3	844.4	909.6
147.5°	572.4	604.9	691.5	811.5	863.7
150°	586.7	615.6	690.4	793.4	834.0
152.5°	599.7	626.3	689.2	777.9	811.5
155°	622.2	642.4	688.9	759.0	780.7
157.5°	638.5	655.0	688.9	743.4	758.4
160°	650.4	663.4	688.9	735.1	746.6
162.5°	659.8	670.5	690.1	727.9	737.1
165°	672.6	681.3	691.8	720.1	724.4
167.5°	681.5	688.1	693.3	713.4	714.6
170°	687.3	691.7	693.3	711.1	711.1
172.5°	692.1	694.2	693.3	707.5	706.3
175°	696.2	697.7	693.3	702.2	700.7
177.5°	697.4	697.4	692.7	699.7	697.4
180°	696.2	696.2	696.2	696.2	696.2

(END OF REPORT)