

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: P519960

Luminaire Tested: **SQ4-F-050U-125D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519960
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

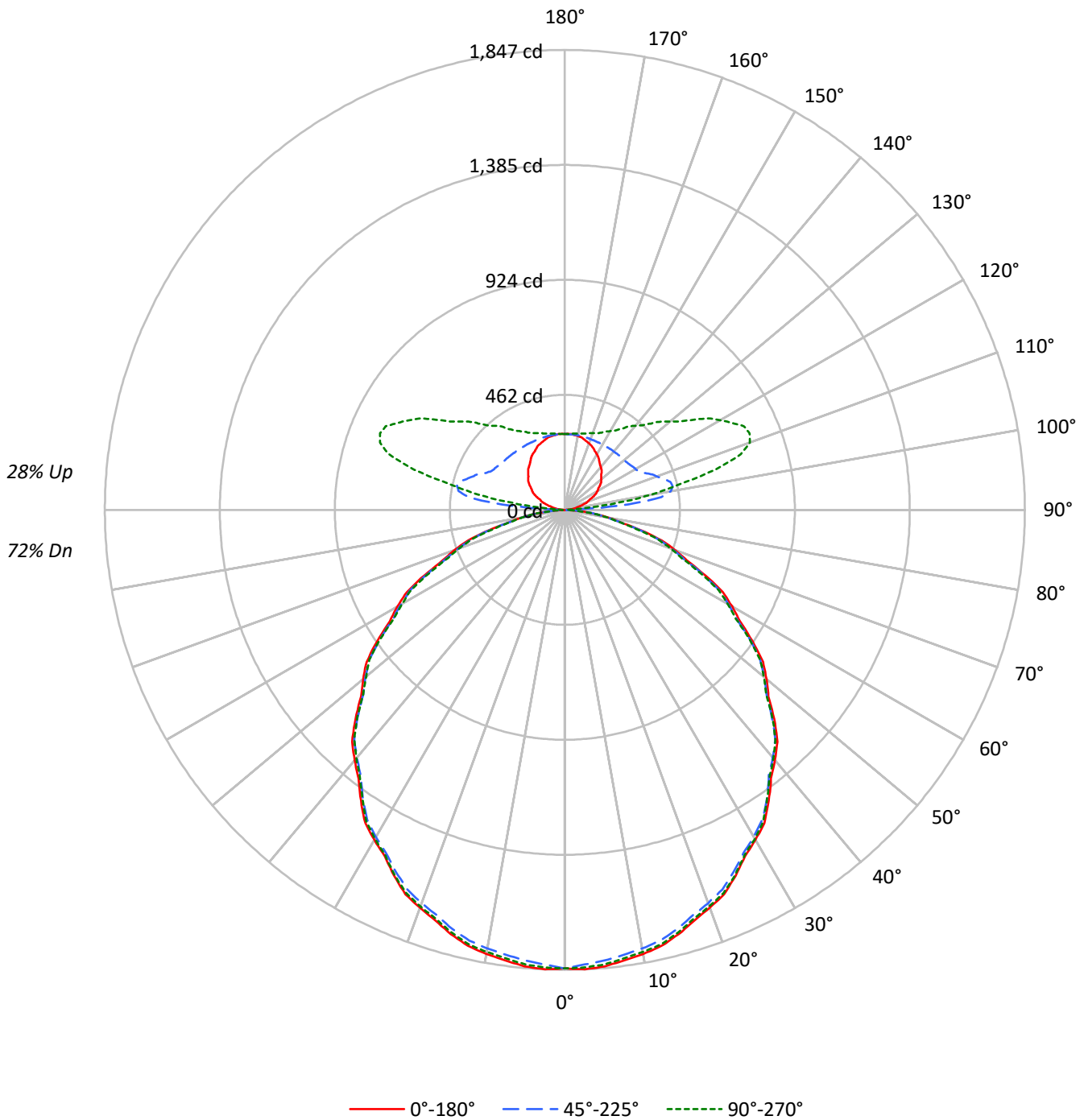
Lumens per Lamp: N/A
Luminaire Lumens: 7017.4 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16991	16991	16991
5°	17046	16830	16971
10°	16968	16759	16891
15°	16854	16651	16786
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16163	16250
35°	16072	15936	15947
40°	15808	15637	15686
45°	15513	15340	15366
50°	15173	14998	14955
55°	14787	14575	14543
60°	14306	13989	13915
65°	13564	13275	13099
70°	12630	12304	12139
75°	11236	10983	10659
80°	9155	8884	8830
85°	5473	6224	6224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.8	2.5
10°-20°	494.9	7.1
20°-30°	743.5	10.6
30°-40°	887.1	12.6
40°-50°	909.3	13.0
50°-60°	810.5	11.5
60°-70°	603.3	8.6
70°-80°	326.9	4.7
80°-90°	76.2	1.1
90°-100°	146.4	2.1
100°-110°	397.8	5.7
110°-120°	409.0	5.8
120°-130°	327.0	4.7
130°-140°	257.0	3.7
140°-150°	197.0	2.8
150°-160°	141.7	2.0
160°-170°	86.7	1.2
170°-180°	29.2	0.4
0°-30°	1412.1	20.1
0°-40°	2299.2	32.8
0°-60°	4019.1	57.3
0°-90°	5025.5	71.6
90°-120°	953.3	13.6
90°-150°	1734.4	24.7
90°-180°	1992.0	28.4
0°-180°	7017.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1842	1842	1842	1842	1842	
5°	1840	1838	1817	1834	1832	175
15°	1764	1761	1743	1758	1757	497
25°	1622	1619	1604	1614	1618	747
35°	1427	1426	1415	1415	1416	892
45°	1189	1186	1176	1174	1178	916
55°	919	916	906	899	904	821
65°	621	617	608	604	600	615
75°	315	315	308	302	299	335
85°	52	59	59	60	59	71
90°	1	4	7	9	9	3
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1841.6	1841.6	1841.6	1841.6	1841.6
2.5°	1847.2	1844.1	1827.8	1841.5	1839.1
5°	1840.5	1837.6	1817.2	1833.5	1832.4
7.5°	1824.9	1821.2	1802.6	1817.8	1816.0
10°	1811.2	1808.2	1788.9	1804.1	1803.0
12.5°	1794.1	1791.2	1771.8	1787.0	1786.8
15°	1764.5	1760.6	1743.3	1758.5	1757.4
17.5°	1729.1	1724.5	1707.4	1719.3	1721.4
20°	1700.7	1697.7	1681.4	1692.6	1694.6
22.5°	1671.5	1667.7	1650.6	1663.4	1665.4
25°	1621.6	1618.7	1604.4	1613.6	1617.6
27.5°	1566.9	1566.9	1553.7	1560.3	1562.6
30°	1530.4	1530.4	1517.2	1521.4	1525.3
32.5°	1491.5	1488.4	1475.9	1479.2	1483.2
35°	1427.0	1426.0	1414.9	1414.9	1415.9
37.5°	1360.3	1357.6	1345.3	1346.3	1351.0
40°	1312.5	1310.5	1298.3	1298.4	1302.4
42.5°	1263.9	1261.8	1251.3	1249.7	1251.3
45°	1188.9	1185.9	1175.7	1173.8	1177.7
47.5°	1109.0	1109.8	1097.6	1094.8	1097.0
50°	1057.1	1057.1	1044.9	1039.0	1041.9
52.5°	1002.8	1001.2	989.0	982.3	989.2
55°	919.3	916.3	906.1	899.1	904.1
57.5°	833.7	829.2	818.9	811.3	814.1
60°	775.3	768.4	758.1	752.0	754.1
62.5°	714.5	710.8	699.7	690.5	694.9
65°	621.3	617.3	608.1	604.0	600.0
67.5°	529.9	527.3	516.9	512.5	510.0
70°	468.2	463.3	456.1	451.0	450.0
72.5°	408.2	402.5	395.3	390.9	388.4
75°	315.2	315.2	308.1	301.9	299.0
77.5°	226.6	227.4	221.6	219.5	218.1
80°	172.3	172.3	167.2	165.2	166.2
82.5°	120.4	122.7	121.0	118.2	116.8
85°	51.7	58.6	58.8	59.8	58.8
87.5°	9.1	15.3	16.8	15.6	14.0
90°	1.0	3.8	6.9	8.8	8.8
92.5°	8.8	40.1	69.7	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.4	391.0	304.2	213.6
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.6	99.6	443.5	542.4	467.9
105°	70.7	110.0	437.5	666.2	626.8
107.5°	87.3	122.1	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.6	789.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.6	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.5	334.7	646.4	755.5
120°	151.0	176.0	327.7	612.6	721.0
122.5°	159.7	184.7	322.9	578.8	683.4
125°	172.6	196.6	316.9	533.8	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	312.0	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	207.9	231.0	308.0	434.8	490.4
137.5°	218.3	239.2	306.8	412.4	459.2
140°	224.6	244.7	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.4	303.1	347.7	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.9	333.1
160°	284.5	291.1	302.1	321.9	327.7
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.9
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.0	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.1	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.7	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)