

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: P521638

Luminaire Tested: **SQ4-F-125U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521638
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-F-125U-100D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

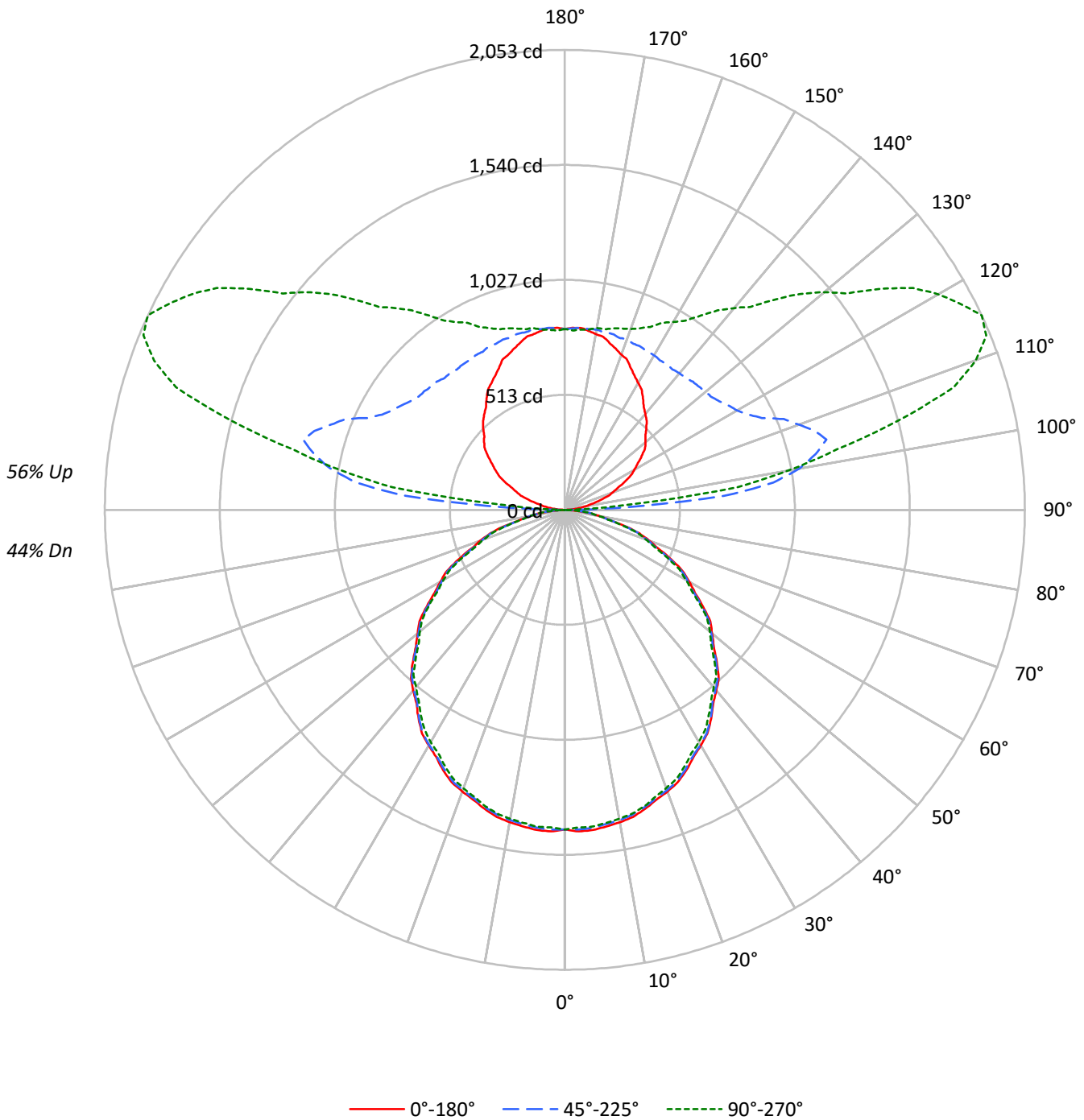
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9300.3 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.6
Input Voltage (V): 120
Input Current (A_{in}): 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	50	50	50	44
1	96	92	88	85	88	84	81	78	70	67	65	57	55	53	44	43	42	37
2	88	80	74	69	80	73	68	64	61	57	54	49	47	44	39	37	35	30
3	80	70	63	57	73	64	58	53	54	49	45	44	40	37	34	32	30	26
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	38	42	37	33	35	31	27	27	25	22	19
6	61	49	41	35	56	45	38	33	38	33	28	31	27	24	25	22	19	16
7	57	44	36	31	52	41	34	29	34	29	25	28	24	21	23	20	17	15
8	53	40	33	27	48	37	30	25	31	26	22	26	22	19	21	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	26	22	42	31	25	20	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13169	13169	13169
5°	13286	13192	13144
10°	13268	13171	13114
15°	13204	13126	13087
20°	13140	13079	12979
25°	13061	12988	12873
30°	12937	12904	12751
35°	12823	12777	12615
40°	12675	12614	12440
45°	12514	12448	12274
50°	12311	12238	12120
55°	12098	11984	11852
60°	11819	11686	11516
65°	11431	11208	11007
70°	10779	10531	10337
75°	9828	9496	9315
80°	8060	8060	8060
85°	5748	6510	6838



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	1.5
10°-20°	387.0	4.2
20°-30°	585.4	6.3
30°-40°	705.1	7.6
40°-50°	732.2	7.9
50°-60°	664.6	7.1
60°-70°	507.0	5.5
70°-80°	283.4	3.0
80°-90°	73.8	0.8
90°-100°	416.1	4.5
100°-110°	1005.7	10.8
110°-120°	1072.6	11.5
120°-130°	868.8	9.3
130°-140°	672.6	7.2
140°-150°	513.1	5.5
150°-160°	371.4	4.0
160°-170°	228.8	2.5
170°-180°	77.5	0.8
0°-30°	1107.6	11.9
0°-40°	1812.7	19.5
0°-60°	3209.4	34.5
0°-90°	4073.7	43.8
90°-120°	2494.5	26.8
90°-150°	4548.9	48.9
90°-180°	5227.0	56.2
0°-180°	9300.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1435	1420	1424	1421	1419	136
15°	1382	1368	1374	1370	1370	390
25°	1283	1270	1276	1264	1264	591
35°	1138	1128	1134	1120	1120	712
45°	959	952	954	941	941	740
55°	752	750	745	737	737	673
65°	524	520	513	506	504	516
75°	276	272	266	262	261	290
85°	54	59	62	63	65	67
90°	0	0	0	0	0	4
95°	41	208	713	464	325	46
105°	161	278	1209	1564	1544	170
115°	294	376	971	1841	2053	291
125°	419	482	843	1464	1720	374
135°	515	575	809	1155	1328	397
145°	609	654	793	981	1058	380
155°	698	728	804	869	901	322
165°	771	783	814	826	838	218
175°	816	812	816	809	807	77
180°	807	807	807	807	807	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1427.4	1427.4	1427.4	1427.4	1427.4
2.5°	1436.5	1424.4	1428.3	1426.5	1419.2
5°	1434.6	1419.6	1424.4	1421.2	1419.2
7.5°	1425.2	1410.2	1414.9	1410.8	1409.6
10°	1416.2	1401.1	1405.9	1401.8	1399.8
12.5°	1403.9	1389.6	1394.4	1389.5	1389.1
15°	1382.4	1368.3	1374.2	1370.1	1370.1
17.5°	1357.1	1344.1	1350.2	1344.2	1343.2
20°	1338.3	1325.3	1332.1	1322.9	1321.9
22.5°	1317.0	1304.8	1310.8	1300.0	1300.6
25°	1283.0	1269.9	1275.8	1264.5	1264.5
27.5°	1243.8	1231.0	1238.3	1224.7	1223.9
30°	1214.3	1202.3	1211.2	1196.9	1196.9
32.5°	1184.8	1174.4	1180.9	1167.3	1164.9
35°	1138.5	1128.4	1134.4	1120.0	1120.0
37.5°	1087.6	1079.4	1082.5	1069.3	1072.3
40°	1052.4	1043.4	1047.3	1033.9	1032.9
42.5°	1016.3	1008.1	1011.2	997.9	1000.9
45°	959.1	952.1	954.0	940.7	940.7
47.5°	901.1	895.9	894.4	882.5	884.5
50°	857.7	855.7	852.6	842.4	844.4
52.5°	818.3	813.9	809.9	800.5	801.7
55°	752.1	750.1	745.0	736.8	736.8
57.5°	688.8	684.4	678.4	670.0	670.0
60°	640.5	638.4	633.3	624.1	624.1
62.5°	594.5	591.7	585.7	577.3	576.5
65°	523.6	519.6	513.4	506.2	504.2
67.5°	449.6	445.4	440.4	433.6	432.4
70°	399.6	394.6	390.4	385.3	383.2
72.5°	348.8	346.2	341.2	336.1	334.9
75°	275.7	271.6	266.4	262.3	261.3
77.5°	198.4	197.8	195.9	193.3	194.3
80°	151.7	152.7	151.7	150.7	151.7
82.5°	109.9	112.5	112.3	112.1	113.1
85°	54.3	59.3	61.5	62.6	64.6
87.5°	15.6	20.4	24.6	25.4	26.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.7	112.6	265.3	129.0	87.5
95°	41.0	208.2	712.9	463.6	324.8
97.5°	72.8	230.6	939.0	904.6	776.5
100°	97.5	244.6	1063.4	1122.6	1017.3
102.5°	120.7	257.1	1145.5	1304.1	1241.6
105°	160.7	277.7	1208.8	1563.9	1543.9
107.5°	200.0	302.0	1171.5	1772.3	1819.5
110°	227.4	322.7	1111.3	1862.2	1950.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	254.7	343.3	1058.0	1884.1	2035.6
115°	294.1	376.0	971.1	1841.0	2053.3
117.5°	333.0	410.3	920.2	1742.0	1990.8
120°	359.0	430.9	887.3	1664.3	1925.1
122.5°	386.4	452.9	866.8	1584.9	1841.7
125°	418.9	482.4	842.9	1464.2	1720.0
127.5°	451.0	510.9	826.1	1361.9	1586.6
130°	470.2	528.7	820.7	1290.7	1511.4
132.5°	487.9	549.1	812.4	1239.3	1426.6
135°	514.6	574.8	808.7	1154.6	1328.4
137.5°	539.9	600.4	796.7	1097.2	1228.2
140°	559.1	614.2	796.7	1055.9	1176.3
142.5°	578.2	633.4	789.9	1019.9	1121.6
145°	608.7	653.8	793.3	981.4	1058.3
147.5°	637.0	680.8	791.2	937.0	1000.5
150°	654.8	693.3	796.7	917.5	967.7
152.5°	674.0	711.1	795.4	896.9	941.7
155°	697.6	727.6	803.6	869.2	901.0
157.5°	725.9	751.7	801.8	858.7	877.4
160°	736.9	758.6	808.7	844.9	858.3
162.5°	754.7	773.7	806.0	840.7	848.7
165°	771.1	782.8	813.8	826.0	837.8
167.5°	791.2	798.9	811.8	825.1	825.4
170°	796.7	801.7	817.2	815.7	824.1
172.5°	806.3	810.0	813.1	816.8	811.8
175°	815.5	812.2	815.5	808.6	807.0
177.5°	813.8	813.8	811.1	808.2	801.5
180°	807.0	807.0	807.0	807.0	807.0

(END OF REPORT)