

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: P519095

Luminaire Tested: **SQ4-WB-050U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519095
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-075D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

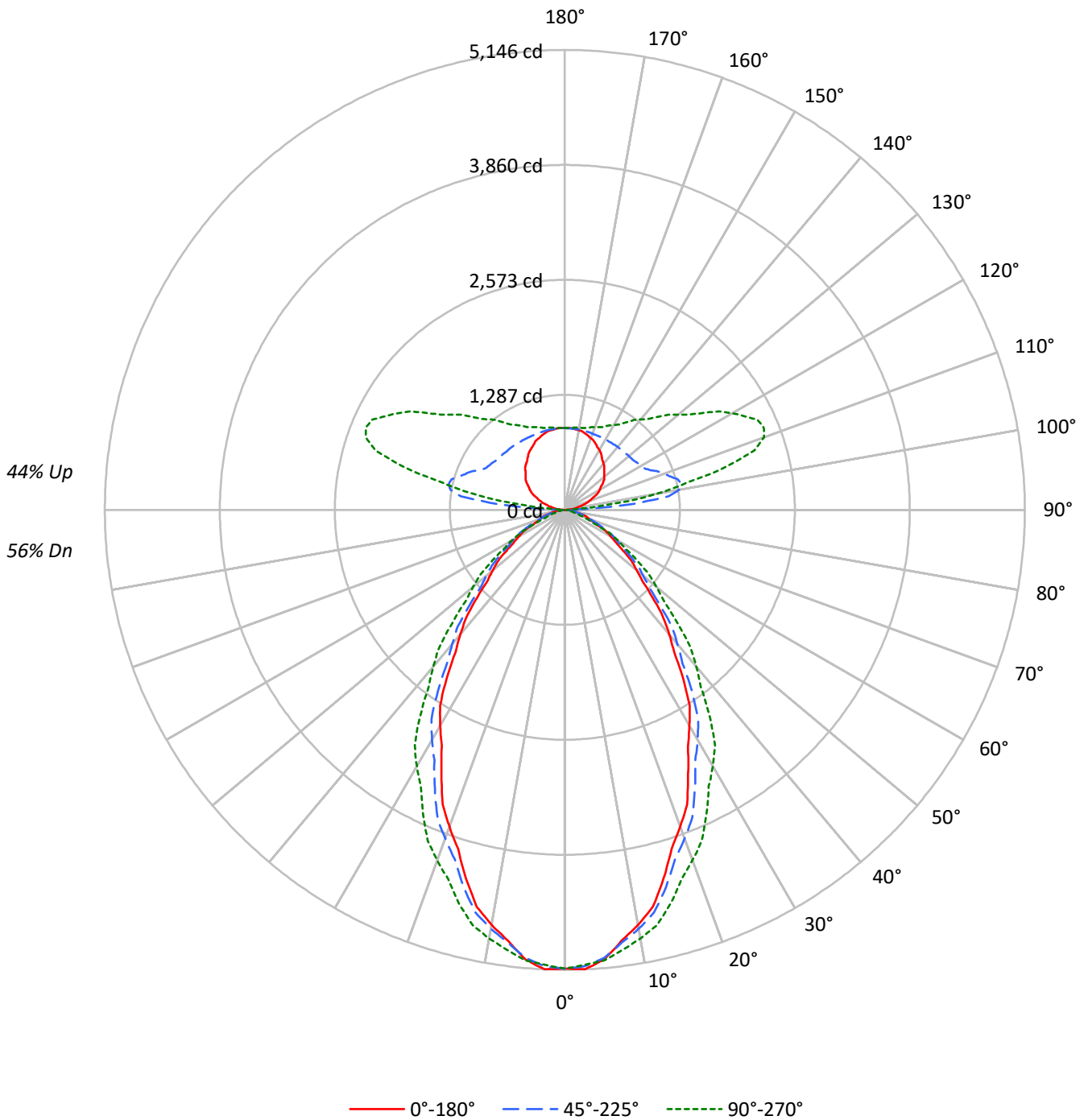
Lumens per Lamp: N/A
Luminaire Lumens: 13459.5 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 105.6
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15787	15787	15787
5°	15590	15535	15625
10°	14729	14863	15208
15°	13597	13913	14537
20°	12348	12812	13660
25°	11075	11679	12726
30°	9902	10551	11758
35°	8659	9285	10613
40°	7289	7867	9188
45°	6015	6534	7671
50°	5022	5474	6391
55°	4263	4698	5278
60°	3644	4073	4211
65°	2901	3426	2721
70°	2573	2673	1661
75°	2382	2167	1017
80°	2194	1994	878
85°	1987	1828	716



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.9	3.5
10°-20°	1224.7	9.1
20°-30°	1586.3	11.8
30°-40°	1553.4	11.5
40°-50°	1189.1	8.8
50°-60°	792.3	5.9
60°-70°	432.4	3.2
70°-80°	180.2	1.3
80°-90°	54.5	0.4
90°-100°	439.4	3.3
100°-110°	1193.5	8.9
110°-120°	1227.1	9.1
120°-130°	981.1	7.3
130°-140°	770.9	5.7
140°-150°	591.1	4.4
150°-160°	425.1	3.2
160°-170°	260.0	1.9
170°-180°	87.6	0.7
0°-30°	3281.9	24.4
0°-40°	4835.3	35.9
0°-60°	6816.7	50.6
0°-90°	7483.7	55.6
90°-120°	2860.0	21.2
90°-150°	5203.1	38.7
90°-180°	5976.0	44.4
0°-180°	13459.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5133	5133	5133	5133	5133	
5°	5050	4999	5032	5044	5061	470
15°	4271	4255	4370	4489	4566	1193
25°	3264	3273	3442	3592	3750	1501
35°	2306	2318	2473	2640	2827	1434
45°	1383	1409	1502	1616	1764	1079
55°	795	828	876	909	984	721
65°	399	432	471	411	374	414
75°	200	200	182	125	86	214
85°	56	56	52	34	20	61
90°	3	12	21	26	26	7
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

TEST NUMBER: P519095

CATALOG NUMBER: SQ4-WB-050U-075D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5133.3	5133.3	5133.3	5133.3	5133.3
2.5°	5146.0	5100.1	5111.7	5111.4	5097.3
5°	5050.0	4999.3	5032.0	5043.6	5061.3
7.5°	4862.6	4824.3	4883.8	4927.8	4963.5
10°	4716.6	4683.6	4759.4	4823.6	4869.8
12.5°	4547.3	4519.5	4613.5	4699.5	4759.9
15°	4270.7	4255.2	4369.8	4488.6	4565.7
17.5°	3974.7	3967.2	4098.6	4237.3	4336.0
20°	3772.9	3770.7	3914.8	4059.3	4173.8
22.5°	3569.2	3574.1	3725.6	3875.8	4006.2
25°	3263.8	3272.6	3441.8	3591.8	3750.3
27.5°	2981.3	2985.3	3160.2	3318.6	3487.7
30°	2788.5	2799.6	2971.0	3134.9	3311.1
32.5°	2595.7	2608.5	2776.4	2945.8	3125.5
35°	2306.5	2317.5	2473.2	2639.6	2826.8
37.5°	2008.3	2023.3	2161.5	2318.8	2502.9
40°	1815.5	1837.5	1959.6	2107.9	2288.5
42.5°	1629.9	1657.2	1770.4	1911.1	2074.1
45°	1383.0	1409.4	1502.4	1616.1	1763.7
47.5°	1170.4	1200.8	1272.2	1370.1	1496.1
50°	1049.6	1078.3	1144.2	1216.8	1335.7
52.5°	943.3	972.0	1030.7	1086.6	1187.9
55°	795.1	828.2	876.2	909.4	984.3
57.5°	673.5	705.2	743.3	758.3	803.7
60°	592.4	627.6	662.2	660.5	684.7
62.5°	518.5	548.5	582.9	559.1	560.4
65°	398.7	431.7	470.8	411.3	373.9
67.5°	322.1	329.1	369.4	286.9	242.4
70°	286.1	286.1	297.3	222.1	184.7
72.5°	251.8	251.8	241.5	180.7	141.5
75°	200.5	200.5	182.4	125.2	85.6
77.5°	154.5	152.8	139.7	93.4	62.2
80°	123.9	123.9	112.6	73.8	49.6
82.5°	96.9	96.9	87.4	57.6	36.9
85°	56.3	56.3	51.8	33.5	20.3
87.5°	20.4	22.1	22.1	16.1	14.3
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0

TEST NUMBER: P519095

CATALOG NUMBER: SQ4-WB-050U-075D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)