

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: P213010

Luminaire Tested: **DSI-WS-50L840-1D-UNV-4-STD-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213010
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: DSI-WS-50L840-1D-UNV-4-STD-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream SPECULAR OPTIC, LIGHT LEVEL 4.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5100.0 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.47 / 1.54
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

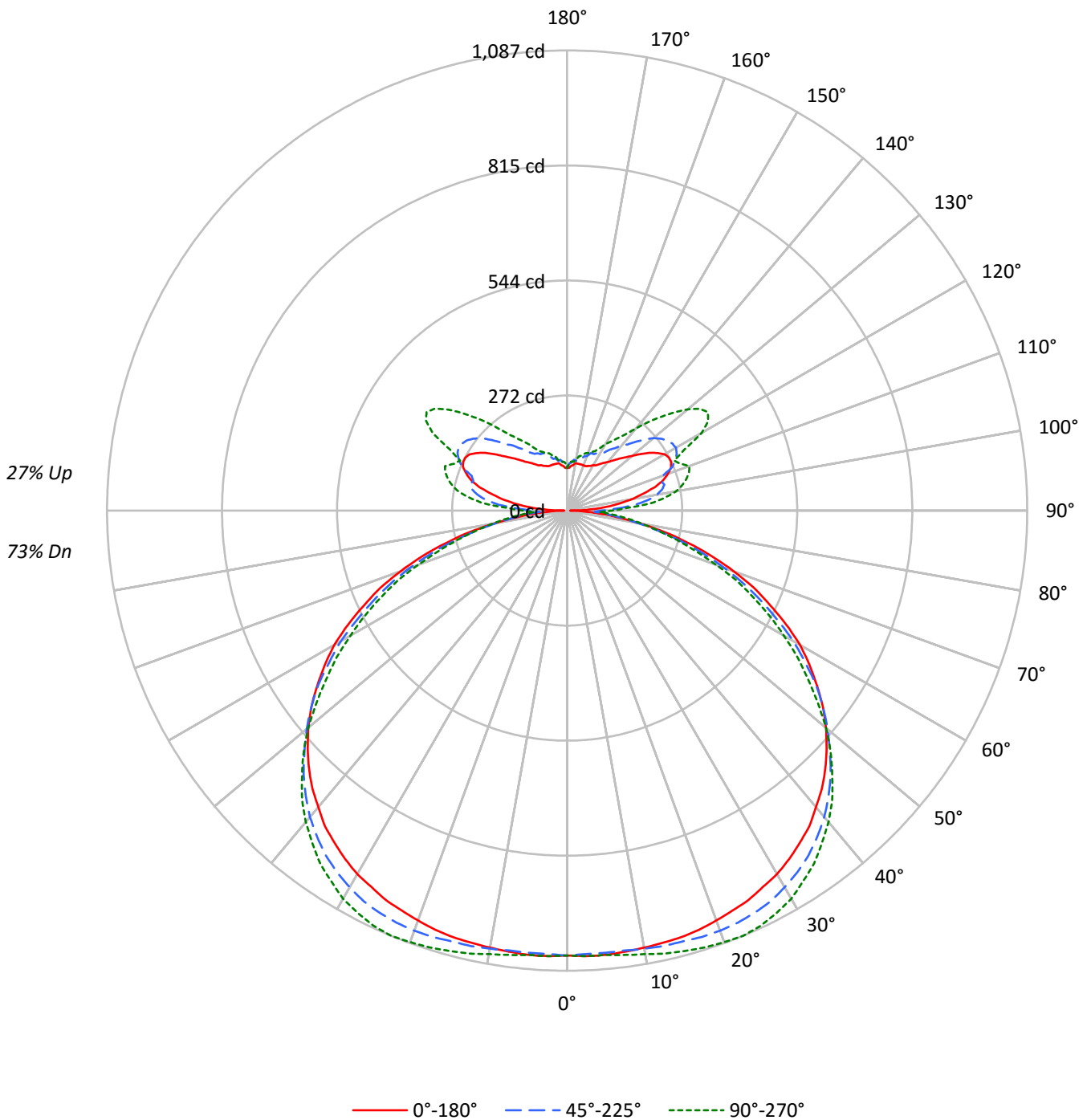
Input Watts (W): 37.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	102	97	93	89	97	92	89	85	83	80	78	75	73	70	67	65	64	60
2	92	84	77	72	87	80	74	69	72	67	63	65	61	58	58	55	53	49
3	84	74	65	59	79	70	63	57	63	57	52	57	52	48	51	47	44	41
4	77	65	56	49	72	62	54	48	56	49	44	50	45	41	45	41	37	34
5	70	57	49	42	66	55	47	41	50	43	38	45	39	35	40	36	32	29
6	65	51	43	36	61	49	41	35	45	38	33	40	35	30	36	32	28	25
7	60	46	38	32	56	44	36	31	40	34	29	37	31	27	33	28	25	22
8	55	42	34	28	52	40	32	27	37	30	25	33	28	24	30	26	22	20
9	51	38	30	25	49	37	29	24	34	27	23	31	25	21	28	23	20	18
10	48	35	27	22	46	34	27	22	31	25	20	28	23	19	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3541	3541	3541
5°	3563	3546	3563
10°	3587	3596	3640
15°	3639	3675	3756
20°	3694	3787	3889
25°	3773	3897	4022
30°	3858	3999	4119
35°	3941	4089	4185
40°	4021	4157	4225
45°	4110	4196	4221
50°	4183	4209	4183
55°	4232	4217	4081
60°	4281	4159	3985
65°	4220	4035	3870
70°	4121	3893	3689
75°	3865	3631	3496
80°	3357	3256	3506
85°	2695	3596	4191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	2.0
10°-20°	299.8	5.9
20°-30°	483.8	9.5
30°-40°	620.1	12.2
40°-50°	677.0	13.3
50°-60°	636.4	12.5
60°-70°	502.0	9.8
70°-80°	297.5	5.8
80°-90°	109.1	2.1
90°-100°	160.5	3.1
100°-110°	253.1	5.0
110°-120°	277.8	5.4
120°-130°	271.4	5.3
130°-140°	185.5	3.6
140°-150°	111.4	2.2
150°-160°	66.7	1.3
160°-170°	36.4	0.7
170°-180°	11.0	0.2
0°-30°	884.2	17.3
0°-40°	1504.3	29.5
0°-60°	2817.7	55.2
0°-90°	3726.3	73.1
90°-120°	691.3	13.6
90°-150°	1259.5	24.7
90°-180°	1374.0	26.9
0°-180°	5100.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1054	1054	1048	1054	1054	100
15°	1043	1046	1054	1072	1077	295
25°	1015	1025	1048	1074	1082	468
35°	958	971	994	1015	1017	600
45°	862	870	880	888	886	665
55°	720	723	718	705	695	644
65°	529	524	506	496	485	524
75°	297	292	279	268	268	314
85°	70	75	93	106	108	79
90°	8	46	80	98	106	13
95°	88	124	163	191	199	84
105°	214	204	238	279	292	222
115°	271	261	282	279	279	265
125°	238	253	289	364	405	212
135°	173	194	230	282	312	135
145°	134	155	176	199	209	85
155°	116	132	147	152	155	54
165°	114	124	126	132	134	32
175°	106	116	114	116	116	10
180°	101	101	101	101	101	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.9	1050.9	1050.9	1050.9	1050.9
2.5°	1053.5	1053.5	1048.3	1053.5	1053.5
5°	1053.5	1053.5	1048.3	1053.5	1053.5
7.5°	1050.9	1050.9	1048.3	1058.7	1058.7
10°	1048.3	1050.9	1050.9	1063.8	1063.8
12.5°	1045.8	1048.3	1053.5	1066.4	1071.6
15°	1043.2	1045.8	1053.5	1071.6	1076.7
17.5°	1038.0	1043.2	1056.1	1076.7	1081.9
20°	1030.3	1038.0	1056.1	1079.3	1084.5
22.5°	1022.5	1032.8	1053.5	1076.7	1087.1
25°	1014.8	1025.1	1048.3	1074.2	1081.9
27.5°	1001.9	1014.8	1040.6	1063.8	1071.6
30°	991.5	1004.4	1027.7	1050.9	1058.7
32.5°	976.0	989.0	1012.2	1032.8	1038.0
35°	958.0	970.9	994.1	1014.8	1017.4
37.5°	939.9	952.8	970.9	986.4	989.0
40°	914.1	927.0	945.1	955.4	960.5
42.5°	890.8	903.7	914.1	924.4	927.0
45°	862.4	870.2	880.5	888.2	885.7
47.5°	831.4	839.2	841.8	849.5	844.4
50°	797.9	803.0	803.0	803.0	797.9
52.5°	761.7	761.7	761.7	754.0	746.2
55°	720.4	723.0	717.8	704.9	694.6
57.5°	679.1	679.1	666.2	653.3	645.5
60°	635.2	627.5	617.1	599.1	591.3
62.5°	583.6	575.8	560.3	547.4	539.7
65°	529.3	524.2	506.1	495.8	485.4
67.5°	477.7	469.9	451.9	436.4	433.8
70°	418.3	413.1	395.1	382.2	374.4
72.5°	358.9	351.2	335.7	325.3	317.6
75°	296.9	291.8	278.9	268.5	268.5
77.5°	237.6	232.4	219.5	219.5	219.5
80°	173.0	173.0	167.8	175.6	180.7
82.5°	118.8	118.8	126.5	139.4	142.0
85°	69.7	74.9	93.0	105.9	108.4
87.5°	31.0	43.9	64.6	74.9	77.5
90°	7.7	46.5	80.0	98.1	105.9
92.5°	46.5	87.8	121.4	134.3	139.4
95°	87.8	123.9	162.7	191.1	198.8
97.5°	121.4	147.2	193.7	224.6	232.4
100°	154.9	157.5	214.3	250.5	260.8
102.5°	183.3	180.7	229.8	266.0	278.9
105°	214.3	204.0	237.6	278.9	291.8
107.5°	237.6	222.1	232.4	289.2	302.1
110°	253.0	240.1	240.1	281.5	307.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.0	253.0	268.5	268.5	289.2
115°	271.1	260.8	281.5	278.9	278.9
117.5°	271.1	266.0	291.8	327.9	312.4
120°	266.0	268.5	296.9	358.9	366.7
122.5°	253.0	263.4	294.4	369.2	395.1
125°	237.6	253.0	289.2	364.1	405.4
127.5°	219.5	240.1	278.9	353.8	395.1
130°	201.4	224.6	266.0	333.1	371.8
132.5°	185.9	211.7	247.9	307.3	343.4
135°	173.0	193.7	229.8	281.5	312.4
137.5°	160.1	183.3	211.7	258.2	284.0
140°	149.8	175.6	201.4	232.4	253.0
142.5°	142.0	165.3	185.9	211.7	227.2
145°	134.3	154.9	175.6	198.8	209.2
147.5°	126.5	149.8	162.7	185.9	193.7
150°	123.9	142.0	154.9	173.0	180.7
152.5°	118.8	134.3	152.3	162.7	165.3
155°	116.2	131.7	147.2	152.3	154.9
157.5°	113.6	131.7	147.2	147.2	149.8
160°	113.6	123.9	136.9	147.2	144.6
162.5°	113.6	121.4	134.3	144.6	142.0
165°	113.6	123.9	126.5	131.7	134.3
167.5°	113.6	121.4	126.5	129.1	131.7
170°	113.6	116.2	118.8	126.5	121.4
172.5°	108.4	116.2	121.4	118.8	116.2
175°	105.9	116.2	113.6	116.2	116.2
177.5°	100.7	105.9	111.0	113.6	113.6
180°	100.7	100.7	100.7	100.7	100.7

(END OF REPORT)