

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: P213080

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P213080  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35733)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: DSI-WD-50L840-1D-UNV-4-STD-DC-W  
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE  
WaveStream DIFFUSE OPTIC WITH DUST COVER, LIGHT LEVEL 4.  
Light Source: (308) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5165.9 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.47 / 1.55  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Semi-Direct

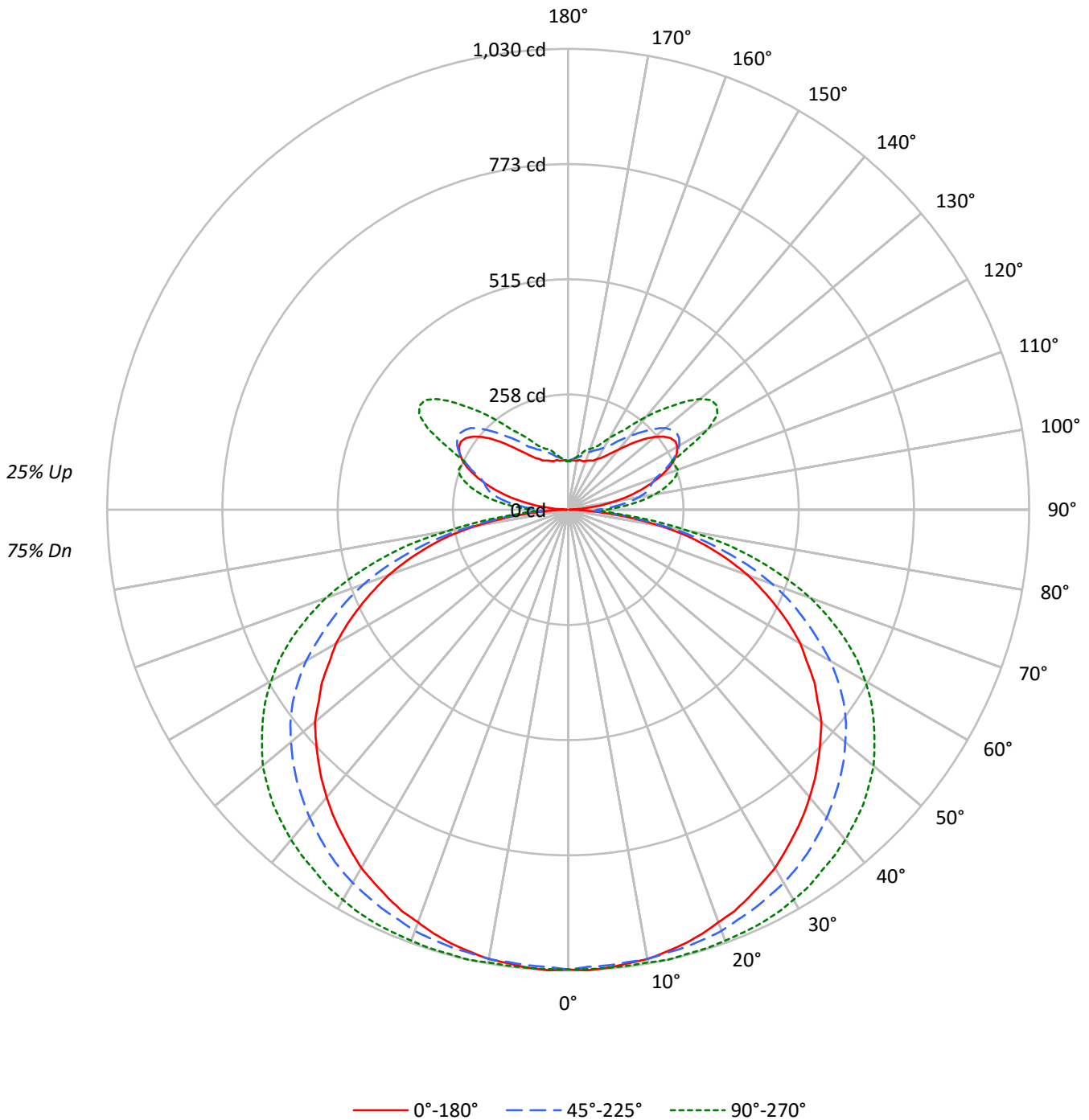
Input Watts (W): 37.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	97	97	97	88	88	88	79	79	79	75
1	102	97	92	88	97	92	88	84	83	80	77	75	73	70	68	66	64	60
2	92	83	76	70	87	79	73	67	72	67	62	65	61	57	58	55	52	49
3	83	72	64	57	79	69	61	55	62	56	51	56	51	47	51	47	43	40
4	76	63	55	48	71	60	52	46	55	48	43	50	44	39	45	40	36	33
5	69	56	47	40	65	54	45	39	49	42	36	44	38	34	40	35	31	28
6	64	50	41	35	60	48	40	34	44	37	31	40	34	29	36	31	27	24
7	59	45	36	30	56	43	35	29	39	32	27	36	30	26	32	27	24	21
8	54	41	32	27	52	39	31	26	36	29	24	33	27	23	30	25	21	19
9	51	37	29	24	48	36	28	23	33	26	22	30	24	20	27	22	19	17
10	47	34	26	21	45	33	26	21	30	24	19	28	22	18	25	20	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3463	3463	3463
5°	3476	3459	3476
10°	3490	3490	3516
15°	3504	3531	3585
20°	3518	3593	3676
25°	3552	3658	3792
30°	3597	3747	3918
35°	3633	3845	4058
40°	3691	3953	4236
45°	3765	4085	4442
50°	3871	4237	4670
55°	3944	4414	4899
60°	4037	4559	5168
65°	4097	4653	5435
70°	4197	4782	5673
75°	4235	4740	5748
80°	4059	4358	5311
85°	2996	3893	4492



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.8	1.9
10°-20°	287.2	5.6
20°-30°	455.6	8.8
30°-40°	586.1	11.3
40°-50°	664.3	12.9
50°-60°	671.7	13.0
60°-70°	586.9	11.4
70°-80°	395.0	7.6
80°-90°	126.2	2.4
90°-100°	114.1	2.2
100°-110°	203.4	3.9
110°-120°	259.2	5.0
120°-130°	282.7	5.5
130°-140°	203.6	3.9
140°-150°	118.1	2.3
150°-160°	67.1	1.3
160°-170°	35.8	0.7
170°-180°	10.9	0.2
0°-30°	840.7	16.3
0°-40°	1426.9	27.6
0°-60°	2762.8	53.5
0°-90°	3870.9	74.9
90°-120°	576.7	11.2
90°-150°	1181.1	22.9
90°-180°	1295.0	25.1
0°-180°	5165.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1028	1028	1028	1028	1028	
5°	1028	1028	1022	1028	1028	98
15°	1004	1007	1012	1025	1028	284
25°	955	966	984	1010	1020	441
35°	883	899	935	971	986	554
45°	790	813	857	912	932	611
55°	671	700	751	806	834	599
65°	514	547	584	651	682	509
75°	325	346	364	418	442	341
85°	78	83	101	114	116	92
90°	3	39	65	83	85	6
95°	39	80	114	134	139	46
105°	165	163	188	225	238	173
115°	261	250	256	261	256	255
125°	279	279	297	367	405	247
135°	214	227	250	300	328	167
145°	147	165	183	207	217	94
155°	121	132	147	152	158	57
165°	114	119	126	132	134	32
175°	111	111	114	114	114	11
180°	108	108	108	108	108	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1027.7	1027.7	1027.7	1027.7	1027.7
2.5°	1030.3	1027.7	1022.5	1027.7	1027.7
5°	1027.7	1027.7	1022.5	1027.7	1027.7
7.5°	1022.5	1025.1	1019.9	1027.7	1027.7
10°	1019.9	1019.9	1019.9	1027.7	1027.7
12.5°	1012.2	1014.8	1014.8	1025.1	1030.3
15°	1004.4	1007.0	1012.2	1025.1	1027.7
17.5°	994.1	999.3	1007.0	1022.5	1027.7
20°	981.2	988.9	1001.9	1019.9	1025.1
22.5°	970.9	978.6	991.5	1014.8	1022.5
25°	955.4	965.7	983.8	1009.6	1019.9
27.5°	939.9	950.2	973.5	1001.9	1014.8
30°	924.4	937.3	963.1	994.1	1007.0
32.5°	903.7	919.2	950.2	983.8	999.3
35°	883.1	898.6	934.7	970.9	986.4
37.5°	862.4	880.5	916.6	958.0	976.0
40°	839.2	857.3	898.6	945.1	963.1
42.5°	815.9	836.6	877.9	927.0	947.6
45°	790.1	813.4	857.3	911.5	932.1
47.5°	764.3	787.5	834.0	890.8	911.5
50°	738.5	761.7	808.2	865.0	890.8
52.5°	702.3	730.7	782.4	836.6	862.4
55°	671.3	699.8	751.4	805.6	834.0
57.5°	632.6	666.2	715.2	772.1	803.0
60°	599.0	627.5	676.5	735.9	766.9
62.5°	557.7	588.7	630.0	694.6	728.2
65°	513.8	547.4	583.6	650.7	681.7
67.5°	469.9	500.9	537.1	599.0	630.0
70°	426.0	454.5	485.4	547.4	575.8
72.5°	377.0	402.8	428.6	485.4	511.3
75°	325.3	346.0	364.1	418.3	441.5
77.5°	273.7	284.0	299.5	346.0	366.7
80°	209.2	216.9	224.6	263.4	273.7
82.5°	142.0	147.2	157.5	180.7	191.1
85°	77.5	82.6	100.7	113.6	116.2
87.5°	25.8	41.3	59.4	69.7	74.9
90°	2.6	38.7	64.6	82.6	85.2
92.5°	12.9	59.4	87.8	103.3	108.4
95°	38.7	80.0	113.6	134.3	139.4
97.5°	72.3	100.7	139.4	162.7	170.4
100°	103.3	118.8	160.1	188.5	196.2
102.5°	136.9	136.9	178.2	209.2	219.5
105°	165.3	162.7	188.5	224.6	237.6
107.5°	193.7	185.9	196.2	237.6	253.0
110°	219.5	209.2	209.2	240.1	260.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	242.7	229.8	235.0	240.1	258.2
115°	260.8	250.5	255.6	260.8	255.6
117.5°	273.7	266.0	273.7	312.4	304.7
120°	281.5	276.3	286.6	346.0	361.5
122.5°	284.0	281.5	294.4	361.5	395.1
125°	278.9	278.9	296.9	366.7	405.4
127.5°	268.5	273.7	291.8	358.9	402.8
130°	253.0	260.8	284.0	343.4	384.7
132.5°	235.0	245.3	268.5	322.8	358.9
135°	214.3	227.2	250.5	299.5	327.9
137.5°	193.7	209.2	232.4	273.7	299.5
140°	175.6	193.7	214.3	250.5	271.1
142.5°	160.1	178.2	198.8	227.2	242.7
145°	147.2	165.3	183.3	206.6	216.9
147.5°	136.9	154.9	167.8	193.7	201.4
150°	131.7	144.6	160.1	178.2	185.9
152.5°	123.9	136.9	152.3	162.7	170.4
155°	121.4	131.7	147.2	152.3	157.5
157.5°	118.8	126.5	142.0	147.2	149.8
160°	116.2	123.9	136.9	144.6	144.6
162.5°	113.6	121.4	131.7	139.4	142.0
165°	113.6	118.8	126.5	131.7	134.3
167.5°	113.6	116.2	121.4	126.5	126.5
170°	111.0	113.6	118.8	121.4	121.4
172.5°	111.0	113.6	116.2	118.8	116.2
175°	111.0	111.0	113.6	113.6	113.6
177.5°	111.0	111.0	111.0	111.0	108.4
180°	108.4	108.4	108.4	108.4	108.4

(END OF REPORT)