

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: P213021

Luminaire Tested: **DSI-WS-20L840-1D-UNV-4-STD-DC-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P213021  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35729)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: DSI-WS-20L840-1D-UNV-4-STD-DC-W  
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE  
WaveStream SPECULAR OPTIC WITH DUST COVER, LIGHT LEVEL 1.  
Light Source: (308) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2062.1 lumens  
Efficiency: N/A  
Efficacy: 135.7 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.49 / 1.57  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Semi-Direct

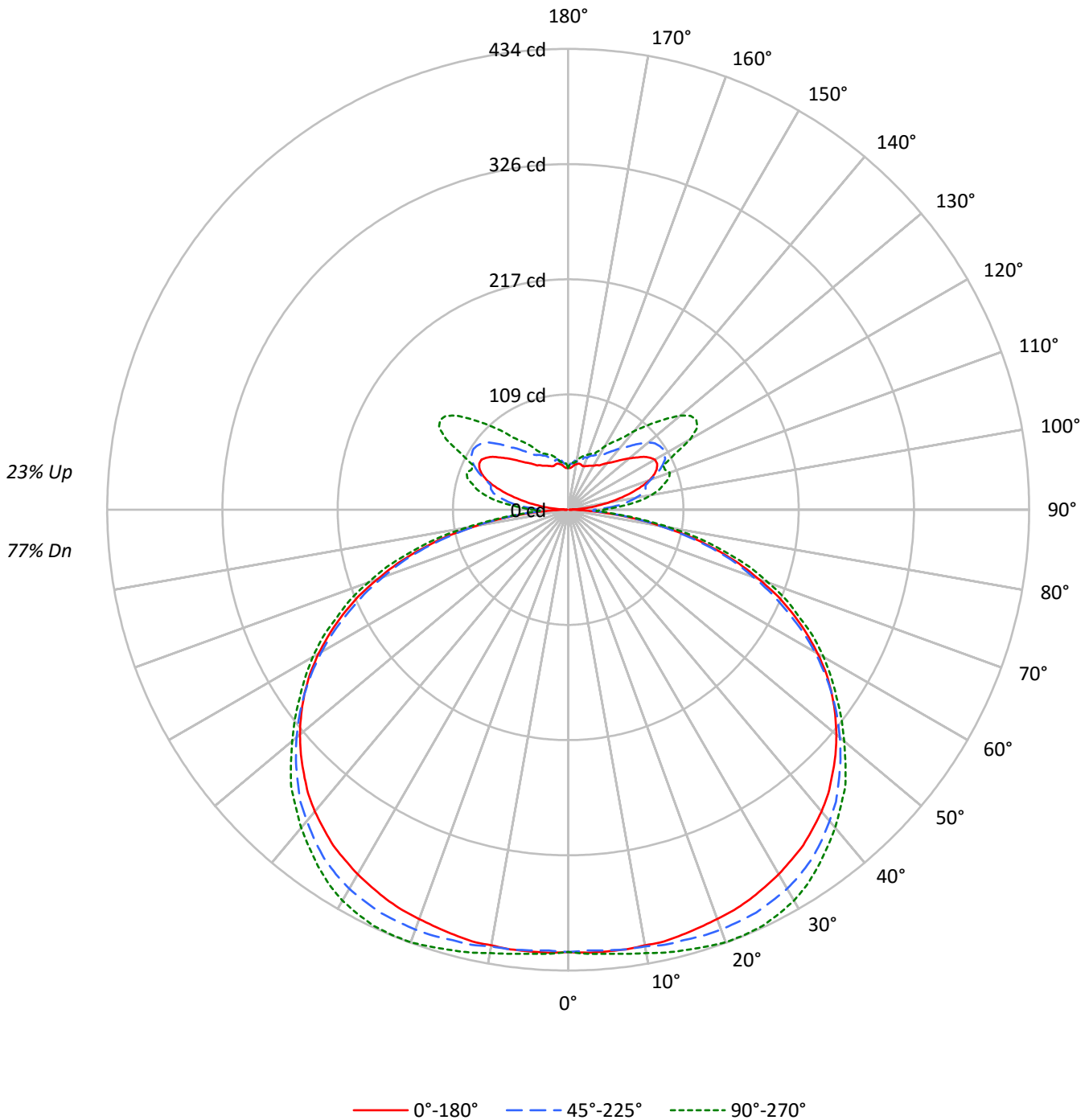
Input Watts (W): 15.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	103	98	93	89	98	93	89	85	85	81	78	77	74	72	70	68	66	62
2	93	84	77	71	88	80	74	68	73	68	63	66	62	59	60	57	54	50
3	84	73	65	58	79	70	62	56	63	57	52	58	53	48	52	48	45	42
4	76	64	55	48	72	61	53	47	56	49	44	51	45	41	46	42	38	35
5	70	57	48	41	66	54	46	40	50	43	37	45	39	35	41	36	32	30
6	64	51	42	35	61	49	40	34	45	37	32	41	35	30	37	32	28	26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	26	34	29	25	22
8	55	41	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20	18
10	48	35	27	22	45	33	26	21	31	24	20	28	23	19	26	21	18	16

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

	0°	45°	90°
0°	1404	1404	1404
5°	1413	1409	1420
10°	1425	1429	1451
15°	1446	1464	1498
20°	1471	1509	1554
25°	1505	1557	1608
30°	1542	1604	1654
35°	1587	1648	1687
40°	1632	1683	1720
45°	1677	1717	1758
50°	1728	1750	1778
55°	1781	1781	1812
60°	1829	1807	1871
65°	1868	1817	1918
70°	1880	1828	1973
75°	1863	1821	1987
80°	1708	1708	1892
85°	1353	1558	1639



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.0	1.9
10°-20°	119.4	5.8
20°-30°	193.4	9.4
30°-40°	250.0	12.1
40°-50°	278.2	13.5
50°-60°	272.7	13.2
60°-70°	231.5	11.2
70°-80°	151.8	7.4
80°-90°	49.5	2.4
90°-100°	46.2	2.2
100°-110°	79.6	3.9
110°-120°	96.1	4.7
120°-130°	98.5	4.8
130°-140°	69.4	3.4
140°-150°	42.2	2.0
150°-160°	25.5	1.2
160°-170°	13.9	0.7
170°-180°	4.2	0.2
0°-30°	352.8	17.1
0°-40°	602.8	29.2
0°-60°	1153.7	55.9
0°-90°	1586.5	76.9
90°-120°	221.8	10.8
90°-150°	432.0	20.9
90°-180°	476.0	23.1
0°-180°	2062.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	418	418	417	420	420	40
15°	414	417	420	427	429	117
25°	405	409	419	429	432	187
35°	386	391	401	408	410	241
45°	352	356	360	366	369	272
55°	303	303	303	307	308	271
65°	234	232	228	240	241	231
75°	143	140	140	153	153	150
85°	35	36	40	44	42	40
90°	1	15	24	31	33	3
95°	16	34	48	55	56	18
105°	62	62	75	90	93	64
115°	92	89	98	100	99	90
125°	87	91	105	134	147	77
135°	65	73	86	106	117	51
145°	51	58	66	75	80	33
155°	46	51	56	58	58	21
165°	44	47	48	51	52	12
175°	40	44	44	44	44	4
180°	39	39	39	39	39	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	416.6	416.6	416.6	416.6	416.6
2.5°	417.6	417.6	415.5	417.6	418.7
5°	417.6	417.6	416.6	419.8	419.8
7.5°	417.6	417.6	417.6	420.8	421.9
10°	416.6	417.6	417.6	422.9	424.0
12.5°	416.6	417.6	419.8	425.1	427.2
15°	414.5	416.6	419.8	427.2	429.3
17.5°	412.3	415.5	420.8	429.3	431.4
20°	410.2	414.5	420.8	430.4	433.5
22.5°	408.1	412.3	419.8	430.4	433.5
25°	404.9	409.2	418.7	429.3	432.5
27.5°	400.7	406.0	415.5	426.1	429.3
30°	396.4	402.8	412.3	421.9	425.1
32.5°	391.1	397.5	407.0	416.6	418.7
35°	385.8	391.1	400.7	408.1	410.2
37.5°	378.4	382.7	392.2	399.6	400.7
40°	371.0	375.2	382.7	390.1	391.1
42.5°	362.5	365.7	373.1	378.4	379.5
45°	351.9	356.2	360.4	365.7	368.9
47.5°	341.3	344.5	347.7	353.0	354.0
50°	329.7	331.8	333.9	339.2	339.2
52.5°	316.9	319.1	319.1	323.3	324.4
55°	303.2	303.2	303.2	307.4	308.5
57.5°	288.3	288.3	286.2	291.5	293.6
60°	271.4	271.4	268.2	274.5	277.7
62.5°	253.3	252.3	249.1	256.5	260.8
65°	234.3	232.1	227.9	239.6	240.6
67.5°	214.1	212.0	207.8	219.4	222.6
70°	190.8	190.8	185.5	199.3	200.3
72.5°	168.5	165.4	164.3	176.0	179.1
75°	143.1	139.9	139.9	152.6	152.6
77.5°	117.7	113.4	113.4	125.1	128.3
80°	88.0	86.9	88.0	96.5	97.5
82.5°	62.5	59.4	62.5	67.8	68.9
85°	35.0	36.0	40.3	43.5	42.4
87.5°	13.8	19.1	23.3	25.4	26.5
90°	1.1	14.8	24.4	30.7	32.9
92.5°	6.4	24.4	35.0	41.3	43.5
95°	15.9	33.9	47.7	55.1	56.2
97.5°	26.5	40.3	57.2	66.8	70.0
100°	38.2	46.6	64.7	76.3	79.5
102.5°	49.8	54.1	72.1	83.7	88.0
105°	61.5	61.5	75.3	90.1	93.3
107.5°	72.1	70.0	76.3	94.3	99.6
110°	81.6	77.4	82.7	93.3	101.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	88.0	83.7	91.2	93.3	98.6
115°	92.2	89.0	97.5	99.6	98.6
117.5°	94.3	92.2	102.8	116.6	112.4
120°	94.3	94.3	104.9	128.3	132.5
122.5°	91.2	94.3	106.0	133.6	144.2
125°	86.9	91.2	104.9	133.6	147.3
127.5°	80.6	86.9	102.8	129.3	145.2
130°	75.3	82.7	98.6	123.0	137.8
132.5°	70.0	78.4	92.2	114.5	127.2
135°	64.7	73.1	85.9	106.0	116.6
137.5°	60.4	68.9	79.5	97.5	106.0
140°	57.2	66.8	75.3	88.0	96.5
142.5°	54.1	62.5	70.0	80.6	85.9
145°	50.9	58.3	65.7	75.3	79.5
147.5°	49.8	57.2	61.5	70.0	74.2
150°	47.7	54.1	59.4	65.7	68.9
152.5°	46.6	51.9	58.3	61.5	62.5
155°	45.6	50.9	56.2	58.3	58.3
157.5°	44.5	50.9	55.1	55.1	57.2
160°	43.5	47.7	51.9	56.2	55.1
162.5°	43.5	46.6	51.9	54.1	54.1
165°	44.5	46.6	47.7	50.9	51.9
167.5°	44.5	46.6	48.8	48.8	49.8
170°	43.5	44.5	45.6	48.8	46.6
172.5°	42.4	44.5	46.6	45.6	44.5
175°	40.3	44.5	43.5	44.5	44.5
177.5°	39.2	40.3	43.5	44.5	43.5
180°	39.2	39.2	39.2	39.2	39.2

(END OF REPORT)