

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: P213091

Luminaire Tested: **DSI-WD-20L840-1D-UNV-4-STD-FC-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213091
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35734)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: DSI-WD-20L840-1D-UNV-4-STD-FC-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream DIFFUSE OPTIC WITH FROSTED COVER, LIGHT LEVEL 1.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2120.8 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.43 / 1.52
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

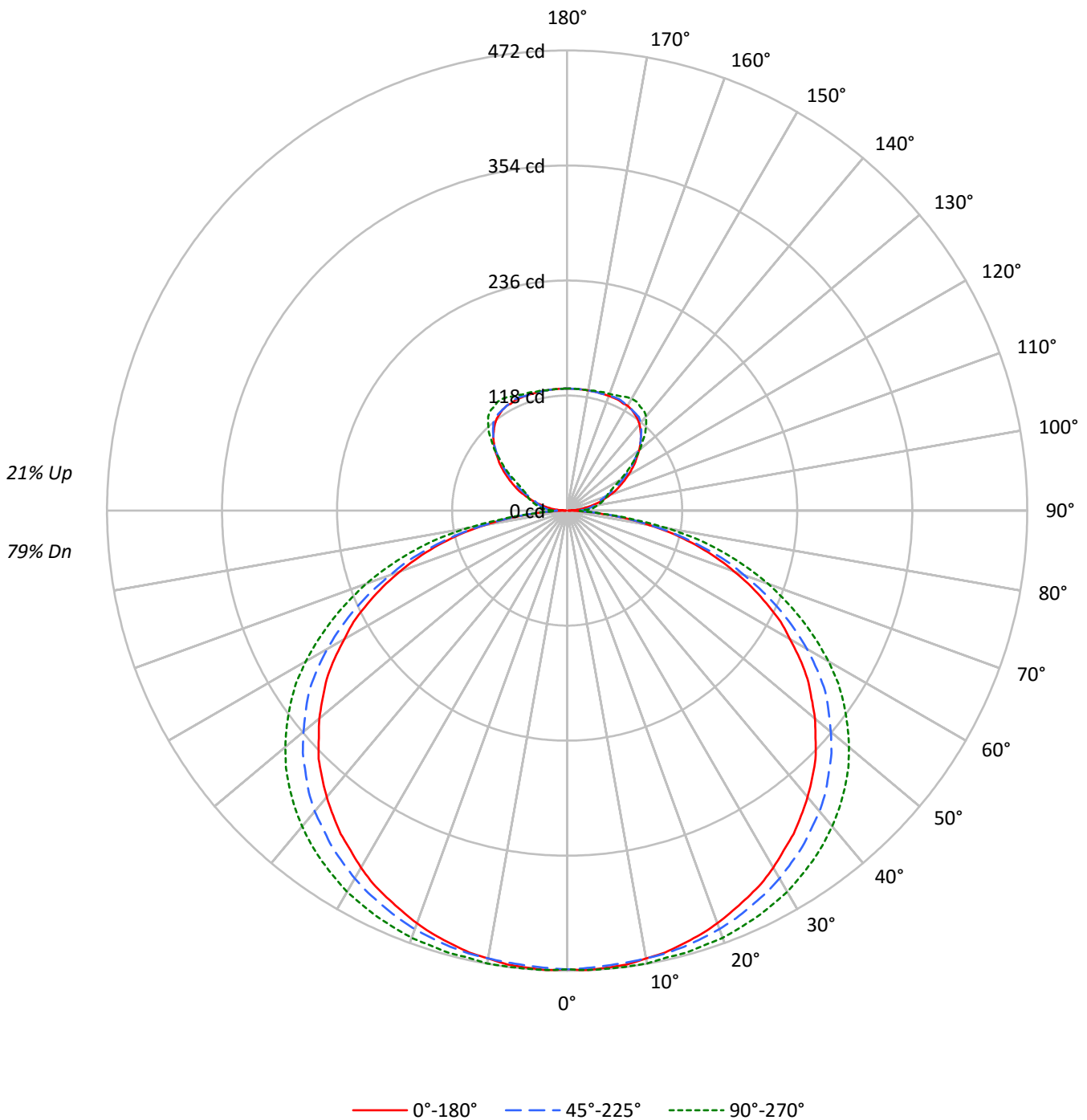
Input Watts (W): 15.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P213091

CATALOG NUMBER: DSI-WD-20L840-1D-UNV-4-STD-FC-W

Luminous Intensity Polar Plot





TEST NUMBER: P213091

CATALOG NUMBER: DSI-WD-20L840-1D-UNV-4-STD-FC-W

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	109	109	109	109	99	99	99	91	91	91	82	82	82	79
1	103	98	94	90	98	94	90	86	86	83	80	78	76	73	71	69	68	64
2	93	85	78	72	89	81	75	69	74	69	64	68	63	60	62	58	55	52
3	84	74	65	59	80	71	63	57	64	58	53	59	54	50	54	50	46	43
4	77	65	56	49	73	62	54	48	57	50	45	52	46	42	47	43	39	36
5	70	57	48	42	67	55	47	40	51	44	38	46	40	36	42	37	34	31
6	65	51	42	36	61	49	41	35	45	38	33	42	36	31	38	33	29	27
7	60	46	38	31	57	44	36	31	41	34	29	38	32	27	35	30	26	23
8	56	42	34	28	53	40	32	27	37	30	26	34	28	24	32	27	23	21
9	52	38	30	25	49	37	29	24	34	27	23	32	26	22	29	24	20	18
10	48	35	27	22	46	34	27	22	31	25	21	29	23	19	27	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1586	1586	1586
5°	1592	1585	1595
10°	1596	1596	1614
15°	1605	1616	1638
20°	1615	1638	1672
25°	1628	1663	1710
30°	1645	1695	1757
35°	1666	1731	1805
40°	1688	1772	1860
45°	1717	1808	1919
50°	1739	1850	1978
55°	1768	1899	2036
60°	1778	1915	2086
65°	1800	1918	2122
70°	1796	1900	2162
75°	1780	1863	2166
80°	1667	1686	2016
85°	1229	1311	1353



TEST NUMBER: P213091

CATALOG NUMBER: DSI-WD-20L840-1D-UNV-4-STD-FC-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	2.1
10°-20°	131.3	6.2
20°-30°	207.1	9.8
30°-40°	263.9	12.4
40°-50°	293.8	13.9
50°-60°	288.2	13.6
60°-70°	240.7	11.4
70°-80°	155.1	7.3
80°-90°	43.6	2.1
90°-100°	21.1	1.0
100°-110°	37.1	1.7
110°-120°	54.2	2.6
120°-130°	72.9	3.4
130°-140°	83.3	3.9
140°-150°	77.6	3.7
150°-160°	58.5	2.8
160°-170°	35.6	1.7
170°-180°	11.9	0.6
0°-30°	383.3	18.1
0°-40°	647.1	30.5
0°-60°	1229.2	58.0
0°-90°	1668.6	78.7
90°-120°	112.3	5.3
90°-150°	346.2	16.3
90°-180°	452.0	21.3
0°-180°	2120.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	471	468	472	472	45
15°	460	462	463	468	470	130
25°	438	441	447	457	460	202
35°	405	409	421	434	439	253
45°	360	366	380	396	403	277
55°	301	307	323	338	347	268
65°	226	231	241	259	266	223
75°	137	139	143	159	166	143
85°	32	33	34	36	35	38
90°	1	7	11	13	13	3
95°	11	16	21	24	26	11
105°	35	33	33	37	38	36
115°	59	58	54	51	50	59
125°	85	83	82	80	80	76
135°	107	105	107	111	113	82
145°	121	120	122	128	130	76
155°	125	125	126	128	129	58
165°	125	125	125	126	126	35
175°	125	125	125	125	125	12
180°	125	125	125	125	125	



TEST NUMBER: P213091

CATALOG NUMBER: DSI-WD-20L840-1D-UNV-4-STD-FC-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	470.6	470.6	470.6	470.6	470.6
2.5°	471.7	471.7	469.6	471.7	471.7
5°	470.6	470.6	468.5	471.7	471.7
7.5°	469.6	469.6	467.5	471.7	471.7
10°	466.4	467.5	466.4	470.6	471.7
12.5°	464.3	465.3	465.3	469.6	469.6
15°	460.0	462.2	463.2	467.5	469.6
17.5°	455.8	457.9	460.0	465.3	467.5
20°	450.5	452.6	456.9	463.2	466.4
22.5°	444.1	447.3	452.6	460.0	463.2
25°	437.8	441.0	447.3	456.9	460.0
27.5°	431.4	434.6	442.0	451.6	455.8
30°	422.9	427.2	435.7	446.3	451.6
32.5°	413.4	418.7	428.2	439.9	445.2
35°	404.9	409.2	420.8	433.5	438.8
37.5°	394.3	399.6	411.3	426.1	431.4
40°	383.7	390.1	402.8	416.6	422.9
42.5°	372.1	377.4	392.2	407.0	413.4
45°	360.4	365.7	379.5	396.4	402.8
47.5°	345.6	353.0	367.8	384.8	391.1
50°	331.8	338.1	353.0	371.0	377.4
52.5°	315.9	324.4	338.1	355.1	362.5
55°	301.0	307.4	323.3	338.1	346.6
57.5°	283.0	290.4	304.2	320.1	329.7
60°	263.9	271.4	284.1	300.0	309.5
62.5°	247.0	251.2	262.9	279.8	288.3
65°	225.8	231.1	240.6	258.6	266.1
67.5°	204.6	208.8	217.3	235.3	242.7
70°	182.3	186.6	192.9	210.9	219.4
72.5°	160.1	163.2	170.7	185.5	192.9
75°	136.7	138.9	143.1	159.0	166.4
77.5°	112.4	112.4	116.6	130.4	137.8
80°	85.9	85.9	86.9	99.6	103.9
82.5°	59.4	57.2	59.4	66.8	67.8
85°	31.8	32.9	33.9	36.0	35.0
87.5°	11.7	13.8	14.8	13.8	13.8
90°	1.1	7.4	10.6	12.7	12.7
92.5°	5.3	12.7	18.0	19.1	20.1
95°	10.6	15.9	21.2	24.4	26.5
97.5°	17.0	18.0	24.4	28.6	28.6
100°	22.3	22.3	27.6	31.8	31.8
102.5°	28.6	27.6	30.7	33.9	35.0
105°	35.0	32.9	32.9	37.1	38.2
107.5°	40.3	39.2	36.0	40.3	41.3
110°	46.6	45.6	41.3	42.4	43.5



TEST NUMBER: P213091

CATALOG NUMBER: DSI-WD-20L840-1D-UNV-4-STD-FC-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	54.1	51.9	47.7	45.6	45.6
115°	59.4	58.3	54.1	50.9	49.8
117.5°	65.7	63.6	60.4	57.2	55.1
120°	72.1	70.0	66.8	64.7	62.5
122.5°	78.4	77.4	74.2	72.1	71.0
125°	84.8	82.7	81.6	79.5	79.5
127.5°	90.1	89.0	88.0	88.0	88.0
130°	96.5	94.3	95.4	95.4	97.5
132.5°	101.8	99.6	101.8	103.9	104.9
135°	107.1	104.9	107.1	111.3	113.4
137.5°	111.3	110.2	112.4	117.7	119.8
140°	115.5	114.5	117.7	123.0	126.1
142.5°	118.7	117.7	120.8	126.1	129.3
145°	120.8	119.8	121.9	128.3	130.4
147.5°	123.0	121.9	123.0	130.4	132.5
150°	124.0	124.0	124.0	130.4	132.5
152.5°	124.0	124.0	125.1	128.3	131.4
155°	125.1	125.1	126.1	128.3	129.3
157.5°	125.1	125.1	126.1	127.2	128.3
160°	125.1	125.1	125.1	127.2	127.2
162.5°	125.1	125.1	125.1	126.1	127.2
165°	125.1	125.1	125.1	126.1	126.1
167.5°	125.1	125.1	125.1	126.1	126.1
170°	125.1	125.1	125.1	125.1	125.1
172.5°	125.1	125.1	125.1	125.1	125.1
175°	125.1	125.1	125.1	125.1	125.1
177.5°	125.1	125.1	125.1	125.1	125.1
180°	125.1	125.1	125.1	125.1	125.1

(END OF REPORT)