

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: METALUX

Report Number: P232446

Luminaire Tested: **2SRS-28-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1706-124-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SRS-28-W-UNV-L840-CD1-U
Description: WAVESTREAM LED RECESSED 2 FT FIXTURE
Light Source: -
Ballast/Driver: -

Summary

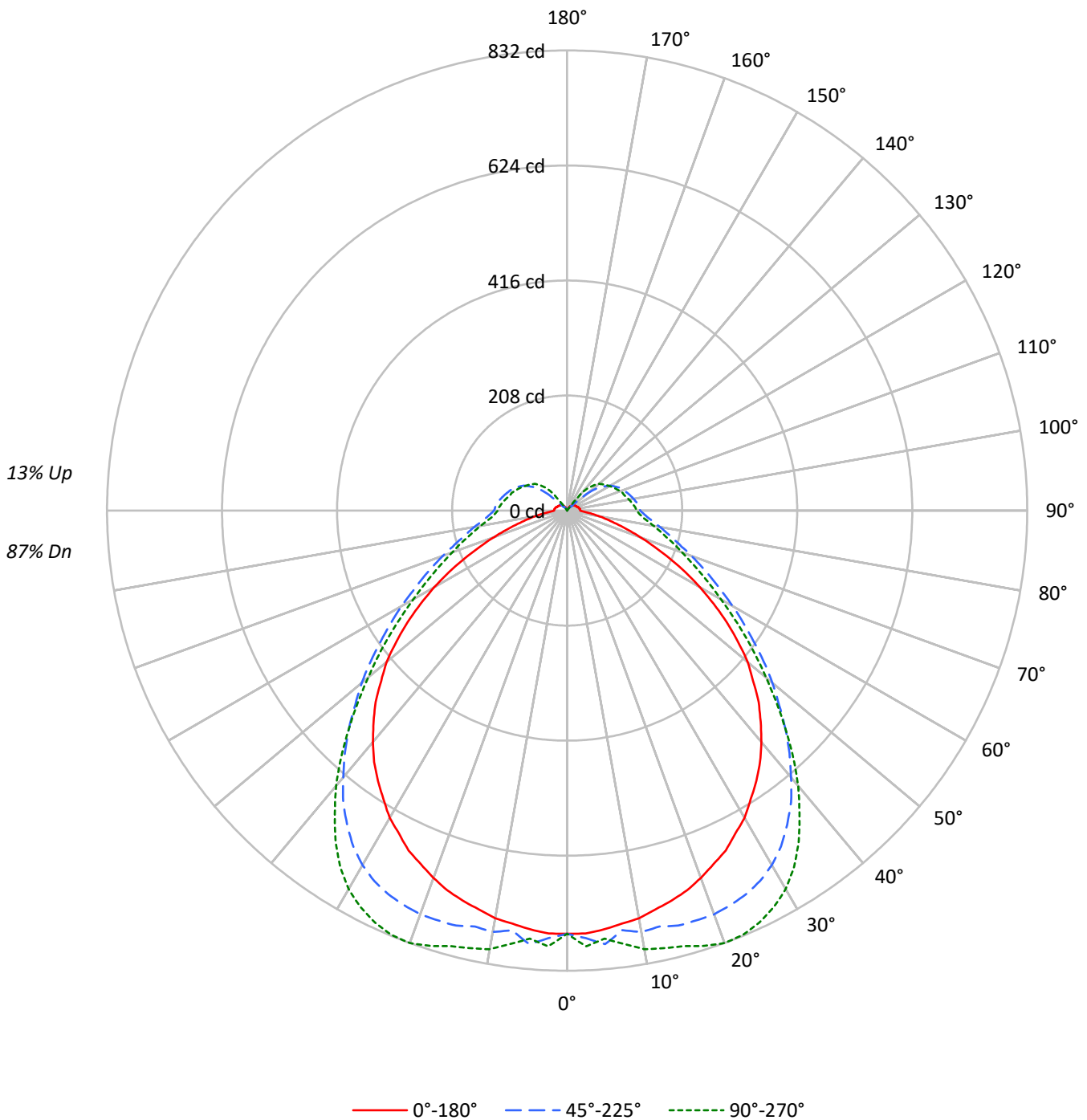
Lumens per Lamp: N/A
Luminaire Lumens: 2785.0 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.44 / 1.43
Luminous Opening: Rectangular w/ Sides (W: 0.02' x L: 1.88' x H: 0.3')
CIE Type: Semi-Direct

Input Watts (W): 21.3
Input Voltage (V): NR
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	50	30	10	0	
RCR																						
0	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87				
1	105	99	95	90	100	96	92	88	89	86	83	83	80	78	77	75	73	70				
2	95	86	79	73	91	83	77	71	78	72	68	72	68	64	67	64	61	58				
3	87	76	68	61	83	73	66	60	68	62	57	64	59	54	60	55	52	49				
4	79	67	58	52	76	65	57	51	61	54	48	57	51	46	53	48	44	42				
5	73	60	51	44	70	58	50	44	54	47	42	51	45	40	48	43	39	36				
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	44	38	34	32				
7	62	49	40	34	60	47	39	34	45	38	32	42	36	31	40	34	30	28				
8	58	45	36	30	56	43	35	30	41	34	29	39	32	28	37	31	27	25				
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	28	24	22				
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	31	26	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	280403	280403	280403
5°	275835	132283	107172
10°	270990	84797	68746
15°	265765	63535	50672
20°	260647	50978	40898
25°	255494	42193	33631
30°	248857	35422	27872
35°	240341	29516	22779
40°	230827	24309	18305
45°	219162	19833	14424
50°	204482	16073	11293
55°	183856	12874	8857
60°	159678	10335	6916
65°	132101	8272	5503
70°	104924	6681	4429
75°	81952	5446	3643
80°	65212	4609	3072
85°	52708	3956	2633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	2.7
10°-20°	219.3	7.9
20°-30°	348.5	12.5
30°-40°	422.5	15.2
40°-50°	415.8	14.9
50°-60°	350.1	12.6
60°-70°	262.5	9.4
70°-80°	186.9	6.7
80°-90°	135.8	4.9
90°-100°	114.7	4.1
100°-110°	98.5	3.5
110°-120°	75.1	2.7
120°-130°	51.0	1.8
130°-140°	24.4	0.9
140°-150°	4.6	0.2
150°-160°	1.1	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	641.8	23.0
0°-40°	1064.4	38.2
0°-60°	1830.2	65.7
0°-90°	2415.4	86.7
90°-120°	288.3	10.4
90°-150°	368.2	13.2
90°-180°	370.0	13.3
0°-180°	2785.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	760	768	787	780	777	72
15°	730	738	777	810	815	206
25°	678	703	765	812	822	312
35°	596	628	693	727	730	373
45°	490	511	558	565	558	376
55°	352	379	411	399	391	314
65°	204	259	287	272	266	204
75°	92	172	199	190	186	100
85°	35	120	147	139	137	33
90°	23	105	132	125	125	13
95°	23	102	129	120	120	19
105°	22	85	115	109	107	22
115°	18	47	100	97	95	18
125°	17	22	74	84	82	14
135°	13	15	12	57	62	10
145°	10	10	7	2	0	6
155°	5	5	2	0	0	3
165°	2	2	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.2	765.2	765.2	765.2	765.2
2.5°	765.2	761.9	773.6	786.9	788.6
5°	760.2	768.5	786.9	780.2	776.9
7.5°	753.5	773.6	765.2	790.3	790.3
10°	748.5	761.9	773.6	791.9	805.3
12.5°	738.5	743.5	770.2	798.6	810.3
15°	730.1	738.5	776.9	810.3	815.3
17.5°	720.1	733.5	776.9	815.3	825.3
20°	706.7	725.1	776.9	815.3	832.0
22.5°	691.7	713.4	771.9	817.0	830.4
25°	678.3	703.4	765.2	812.0	822.0
27.5°	658.3	690.0	755.2	798.6	808.6
30°	641.6	671.6	740.1	778.6	790.3
32.5°	618.2	649.9	720.1	756.8	763.5
35°	596.5	628.2	693.4	726.8	730.1
37.5°	573.1	603.1	665.0	690.0	690.0
40°	546.3	573.1	629.9	649.9	649.9
42.5°	517.9	543.0	594.8	608.2	604.8
45°	489.5	511.2	558.0	564.7	558.0
47.5°	456.1	477.8	519.6	522.9	512.9
50°	426.0	444.4	484.5	479.5	469.5
52.5°	389.3	411.0	447.8	437.7	429.4
55°	352.5	379.3	411.0	399.3	391.0
57.5°	314.1	347.5	377.6	364.2	354.2
60°	277.3	315.8	345.8	330.8	320.8
62.5°	240.6	285.7	314.1	299.1	292.4
65°	203.8	259.0	287.4	272.3	265.6
67.5°	170.4	232.2	262.3	248.9	242.3
70°	140.3	210.5	238.9	225.6	220.5
72.5°	115.3	190.5	217.2	207.2	203.8
75°	91.9	172.1	198.8	190.5	185.5
77.5°	73.5	155.4	183.8	175.4	172.1
80°	58.5	142.0	170.4	160.4	158.7
82.5°	45.1	130.3	157.1	148.7	147.0
85°	35.1	120.3	147.0	138.7	137.0
87.5°	26.7	111.9	138.7	130.3	130.3
90°	23.4	105.3	132.0	125.3	125.3
92.5°	23.4	103.6	130.3	123.6	123.6
95°	23.4	101.9	128.6	120.3	120.3
97.5°	23.4	98.6	125.3	117.0	117.0
100°	21.7	93.6	122.0	113.6	113.6
102.5°	21.7	90.2	118.6	111.9	110.3
105°	21.7	85.2	115.3	108.6	106.9
107.5°	20.0	78.5	111.9	105.3	105.3
110°	20.0	71.8	108.6	103.6	101.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	18.4	61.8	105.3	100.2	98.6
115°	18.4	46.8	100.2	96.9	95.2
117.5°	18.4	35.1	95.2	93.6	91.9
120°	16.7	26.7	90.2	90.2	88.5
122.5°	16.7	25.1	81.9	86.9	85.2
125°	16.7	21.7	73.5	83.5	81.9
127.5°	15.0	20.0	63.5	80.2	78.5
130°	15.0	18.4	50.1	73.5	75.2
132.5°	13.4	16.7	26.7	65.2	68.5
135°	13.4	15.0	11.7	56.8	61.8
137.5°	11.7	13.4	10.0	43.4	53.5
140°	11.7	11.7	8.4	21.7	41.8
142.5°	10.0	10.0	6.7	1.7	15.0
145°	10.0	10.0	6.7	1.7	0.0
147.5°	8.4	8.4	5.0	0.0	0.0
150°	6.7	6.7	3.3	0.0	0.0
152.5°	6.7	5.0	3.3	0.0	0.0
155°	5.0	5.0	1.7	0.0	0.0
157.5°	5.0	3.3	1.7	0.0	0.0
160°	3.3	3.3	1.7	0.0	0.0
162.5°	1.7	1.7	0.0	0.0	0.0
165°	1.7	1.7	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)