

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: P475480

Luminaire Tested: **14CZ2-39-HRP-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475480
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-HRP-UNV-L850-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

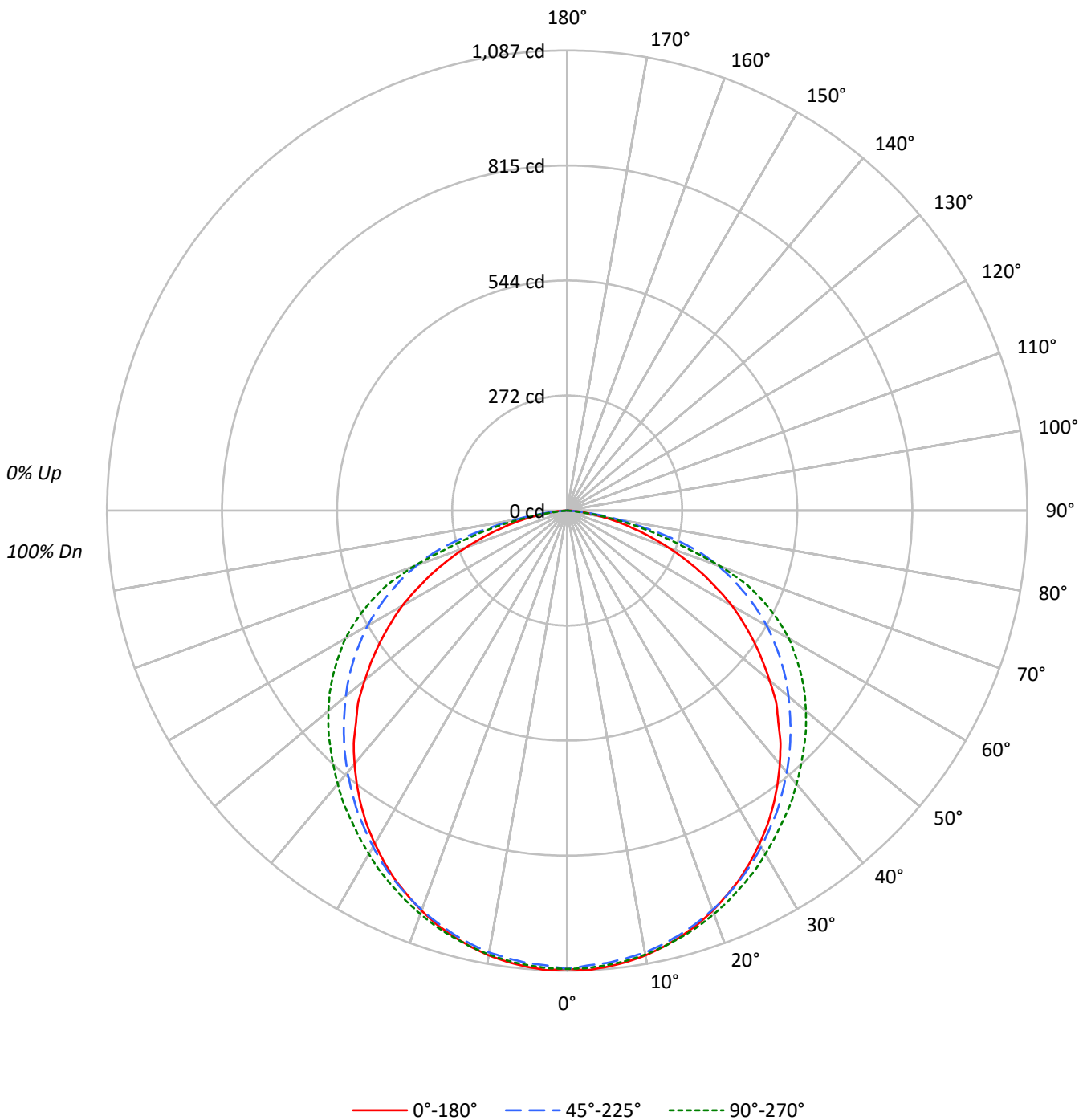
Lumens per Lamp: N/A
Luminaire Lumens: 3235.3 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.8
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	41	33	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2914	2914	2914
5°	2922	2898	2911
10°	2915	2896	2910
15°	2900	2886	2905
20°	2881	2875	2903
25°	2856	2862	2904
30°	2825	2849	2912
35°	2789	2842	2927
40°	2744	2835	2962
45°	2684	2840	3011
50°	2614	2856	3082
55°	2526	2891	3164
60°	2425	2930	3258
65°	2239	2958	3275
70°	1996	2971	3034
75°	1672	2752	2358
80°	1269	1936	1548
85°	895	679	216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.5	3.2
10°-20°	293.7	9.1
20°-30°	446.4	13.8
30°-40°	543.5	16.8
40°-50°	577.4	17.8
50°-60°	546.2	16.9
60°-70°	442.5	13.7
70°-80°	242.6	7.5
80°-90°	40.5	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	842.6	26.0
0°-40°	1386.1	42.8
0°-60°	2509.6	77.6
0°-90°	3235.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3235.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1082	1080	1073	1080	1078	103
15°	1041	1039	1036	1044	1043	294
25°	962	962	964	977	978	443
35°	849	852	865	886	891	531
45°	705	716	746	780	791	545
55°	538	562	616	661	674	481
65°	352	392	464	506	514	348
75°	161	222	265	234	227	172
85°	29	38	22	11	7	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.8	1082.8	1082.8	1082.8	1082.8
2.5°	1086.8	1082.8	1075.8	1082.8	1081.8
5°	1081.8	1079.8	1072.8	1079.8	1077.8
7.5°	1075.8	1073.8	1066.9	1074.8	1072.8
10°	1066.9	1064.9	1059.9	1066.9	1064.9
12.5°	1054.9	1053.9	1048.9	1056.9	1054.9
15°	1040.9	1038.9	1035.9	1043.9	1042.9
17.5°	1024.9	1022.9	1020.9	1030.9	1029.9
20°	1005.9	1004.9	1003.9	1014.9	1013.9
22.5°	983.9	983.9	984.9	996.9	996.9
25°	962.0	962.0	964.0	977.0	978.0
27.5°	936.0	938.0	942.0	956.0	959.0
30°	909.0	911.0	917.0	933.0	937.0
32.5°	880.1	883.1	891.0	910.0	914.0
35°	849.1	852.1	865.1	886.0	891.0
37.5°	816.1	821.1	836.1	860.1	869.1
40°	781.2	789.2	807.1	833.1	843.1
42.5°	746.2	753.2	777.2	807.1	817.1
45°	705.2	716.2	746.2	780.2	791.2
47.5°	669.3	679.3	714.2	752.2	765.2
50°	624.3	639.3	682.3	724.2	736.2
52.5°	581.4	601.4	650.3	693.3	707.2
55°	538.4	562.4	616.3	661.3	674.3
57.5°	493.5	519.4	580.4	626.3	640.3
60°	450.5	478.5	544.4	591.4	605.4
62.5°	399.6	434.5	505.5	550.4	562.4
65°	351.6	391.6	464.5	505.5	514.4
67.5°	302.7	349.6	422.5	458.5	461.5
70°	253.7	306.7	377.6	399.6	385.6
72.5°	205.8	264.7	329.6	311.7	295.7
75°	160.8	221.8	264.7	233.7	226.8
77.5°	118.9	181.8	184.8	169.8	164.8
80°	81.9	140.8	124.9	107.9	99.9
82.5°	52.9	86.9	68.9	50.9	46.0
85°	29.0	38.0	22.0	11.0	7.0
87.5°	11.0	7.0	3.0	3.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)