

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: P294802

Luminaire Tested: **14CZ2-35-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P294802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-35-HRP-UNV-L950-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

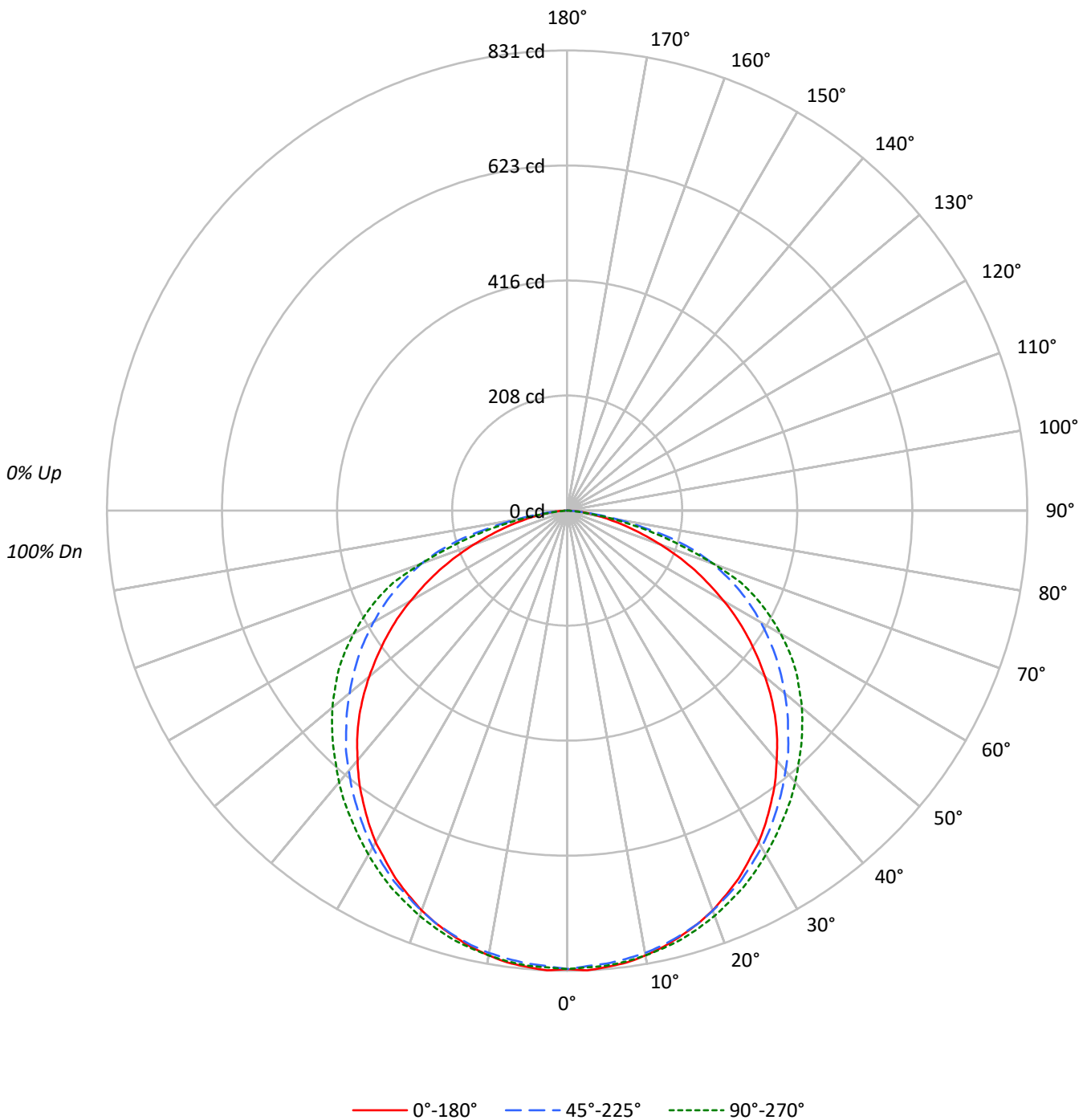
Lumens per Lamp: N/A
Luminaire Lumens: 2438.1 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2228	2228	2228
5°	2234	2218	2228
10°	2229	2216	2229
15°	2215	2211	2232
20°	2200	2202	2231
25°	2176	2195	2231
30°	2149	2182	2230
35°	2111	2166	2234
40°	2068	2154	2251
45°	2025	2148	2276
50°	1955	2147	2317
55°	1871	2158	2367
60°	1758	2174	2397
65°	1621	2197	2411
70°	1412	2201	2220
75°	1163	2048	1794
80°	914	1474	1199
85°	710	568	284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	3.2
10°-20°	224.9	9.2
20°-30°	341.6	14.0
30°-40°	413.9	17.0
40°-50°	436.1	17.9
50°-60°	407.2	16.7
60°-70°	325.4	13.3
70°-80°	179.0	7.3
80°-90°	31.6	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°	644.9	26.5
0°-40°	1058.8	43.4
0°-60°	1902.1	78.0
0°-90°	2438.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2438.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	827	825	821	826	825	79
15°	795	795	794	801	801	224
25°	733	734	739	750	751	337
35°	642	649	659	676	680	402
45°	532	542	564	590	598	409
55°	399	419	460	492	504	356
65°	254	287	345	373	379	251
75°	112	160	197	177	172	120
85°	23	29	18	12	9	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	828.0	828.0	828.0	828.0	828.0
2.5°	831.1	828.8	823.4	828.0	825.7
5°	827.2	824.9	821.1	826.5	824.9
7.5°	823.4	820.3	816.5	822.6	821.1
10°	815.7	813.4	811.1	816.5	815.7
12.5°	806.5	805.8	803.5	809.6	808.8
15°	795.0	795.0	793.5	801.2	801.2
17.5°	782.8	782.0	782.8	791.2	790.4
20°	768.2	768.2	769.0	778.9	778.9
22.5°	750.6	751.3	753.6	765.9	765.1
25°	732.9	734.5	739.1	749.8	751.3
27.5°	711.5	715.3	720.7	733.7	735.2
30°	691.5	693.8	702.3	714.5	717.6
32.5°	667.8	672.4	681.6	695.4	699.2
35°	642.5	648.6	659.3	676.2	680.0
37.5°	617.2	622.5	637.1	654.7	661.6
40°	588.8	598.0	613.3	633.3	640.9
42.5°	561.2	570.4	591.1	611.8	618.7
45°	532.1	542.0	564.3	589.6	598.0
47.5°	499.9	511.4	539.7	566.6	575.8
50°	466.9	481.5	512.9	542.8	553.5
52.5°	432.4	450.8	486.8	518.3	528.2
55°	398.7	418.6	460.0	492.2	504.5
57.5°	364.2	385.6	432.4	469.2	476.1
60°	326.6	352.7	404.0	436.2	445.4
62.5°	289.8	319.7	374.9	405.6	413.2
65°	254.5	286.7	345.0	373.4	378.7
67.5°	216.2	254.5	312.0	338.1	339.6
70°	179.4	223.9	279.8	292.1	282.1
72.5°	143.4	190.9	242.3	232.3	223.9
75°	111.9	160.2	197.0	177.1	172.5
77.5°	82.8	131.1	141.1	130.3	121.9
80°	59.0	103.5	95.1	81.3	77.4
82.5°	40.6	65.2	52.1	40.6	35.3
85°	23.0	29.1	18.4	11.5	9.2
87.5°	10.0	6.9	3.8	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)