

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: P295026

Luminaire Tested: **24CZ2-35-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: P295026
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35-HRP-UNV-L950-CD1-U
Description: 2'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

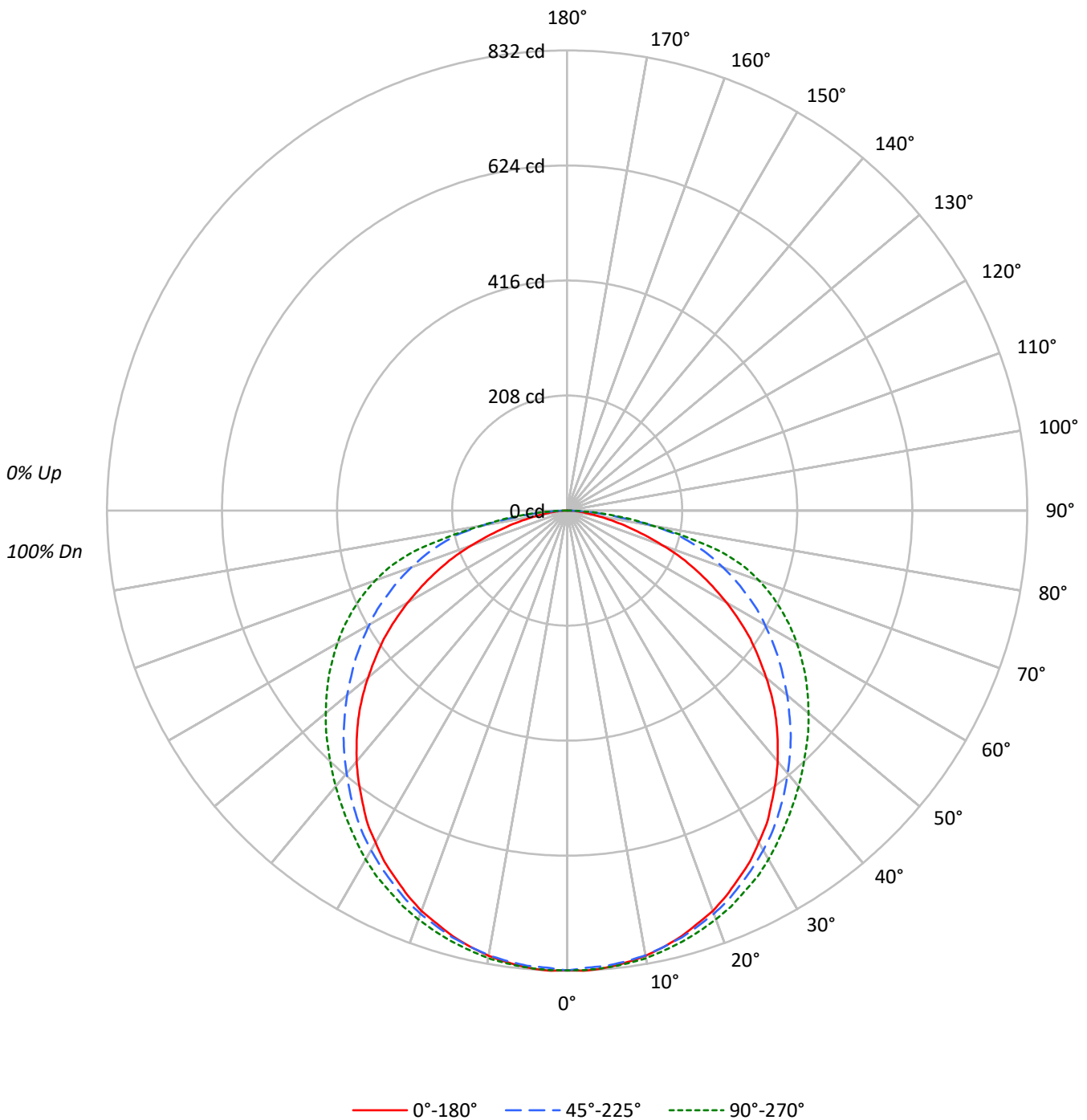
Lumens per Lamp: N/A
Luminaire Lumens: 2562.5 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 30.1
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1119	1119	1119
5°	1120	1116	1120
10°	1117	1115	1123
15°	1110	1113	1124
20°	1103	1111	1126
25°	1089	1105	1128
30°	1077	1102	1132
35°	1059	1096	1133
40°	1040	1089	1144
45°	1017	1088	1161
50°	984	1087	1193
55°	949	1095	1236
60°	895	1111	1290
65°	826	1137	1363
70°	721	1177	1452
75°	585	1238	1500
80°	432	1213	1213
85°	332	894	1010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	3.1
10°-20°	226.2	8.8
20°-30°	344.3	13.4
30°-40°	418.1	16.3
40°-50°	441.7	17.2
50°-60°	416.8	16.3
60°-70°	346.5	13.5
70°-80°	228.0	8.9
80°-90°	62.2	2.4
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°	649.3	25.3
0°-40°	1067.3	41.7
0°-60°	1925.8	75.2
0°-90°	2562.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2562.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	829	829	826	829	829	79
15°	797	798	799	807	807	225
25°	734	738	744	757	760	338
35°	645	652	667	684	690	404
45°	534	545	572	600	610	411
55°	404	422	467	511	527	360
65°	260	290	357	410	428	257
75°	113	164	238	282	289	121
85°	22	47	58	64	65	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.4	831.4	831.4	831.4	831.4
2.5°	832.5	831.4	827.1	831.4	831.4
5°	829.3	829.3	826.1	829.3	829.3
7.5°	823.9	823.9	821.8	826.1	826.1
10°	817.5	817.5	816.4	821.8	821.8
12.5°	807.8	808.9	807.8	814.3	814.3
15°	797.1	798.2	799.2	806.7	806.7
17.5°	783.1	785.3	787.4	796.0	797.1
20°	770.3	771.3	775.6	785.3	786.4
22.5°	753.1	756.3	761.7	771.3	774.6
25°	733.8	738.1	744.5	757.4	759.5
27.5°	715.6	718.8	727.4	741.3	745.6
30°	693.0	698.4	709.1	723.1	728.4
32.5°	671.6	676.9	689.8	704.8	709.1
35°	644.7	652.3	667.3	684.4	689.8
37.5°	619.0	626.5	644.7	664.1	670.5
40°	592.2	600.8	620.1	642.6	651.2
42.5°	563.2	575.0	596.5	621.1	630.8
45°	534.3	545.0	571.8	599.7	610.4
47.5°	503.1	516.0	545.0	578.2	591.1
50°	469.9	486.0	519.2	555.7	569.7
52.5°	436.6	454.9	492.4	533.2	548.2
55°	404.4	421.6	466.7	510.7	526.7
57.5°	369.0	390.5	439.8	487.0	503.1
60°	332.6	356.2	413.0	462.4	479.5
62.5°	296.1	322.9	387.3	436.6	454.9
65°	259.6	289.7	357.2	409.8	428.0
67.5°	224.2	257.5	329.3	381.9	400.2
70°	183.4	225.3	299.3	350.8	369.0
72.5°	145.9	194.2	270.3	318.6	334.7
75°	112.6	164.1	238.2	282.1	288.6
77.5°	82.6	134.1	204.9	219.9	221.0
80°	55.8	107.3	156.6	154.5	156.6
82.5°	36.5	80.5	98.7	110.5	111.6
85°	21.5	47.2	57.9	64.4	65.4
87.5°	10.7	16.1	20.4	21.5	23.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)