

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: P274720

Luminaire Tested: **14CZ2-39HE-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

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: P274720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39HE-RDP-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2152.0 lumens
Efficiency: N/A
Efficacy: 73.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

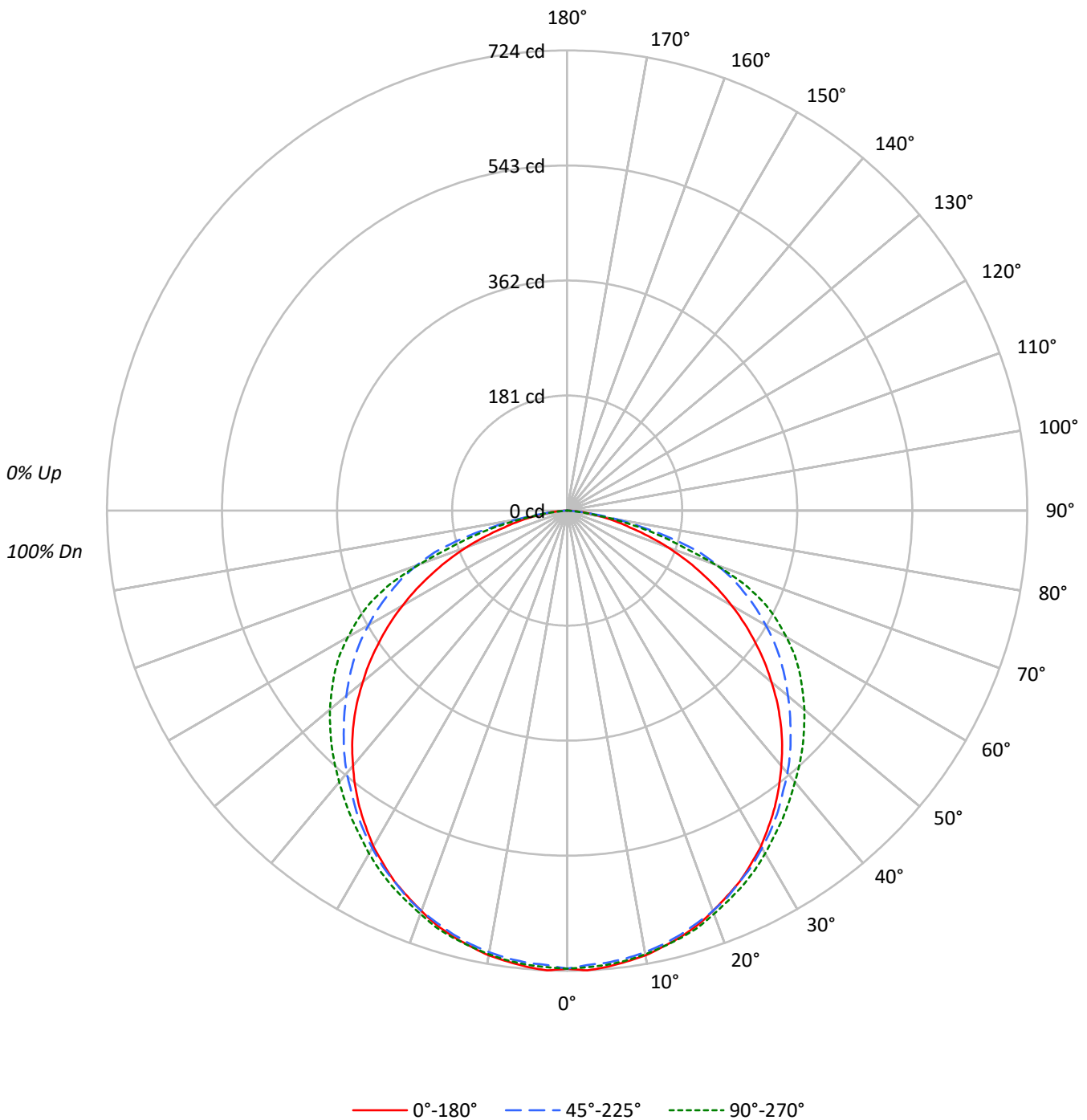
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	40	51	44	39	50	44	39	37
7	64	50	42	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	42	34	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°	1940	1940	1940
5°	1947	1929	1938
10°	1942	1928	1937
15°	1933	1924	1938
20°	1920	1920	1934
25°	1911	1911	1936
30°	1895	1905	1937
35°	1871	1899	1943
40°	1841	1894	1959
45°	1810	1893	1995
50°	1758	1899	2040
55°	1695	1923	2097
60°	1610	1944	2143
65°	1487	1968	2172
70°	1322	1983	1943
75°	1066	1782	1554
80°	834	1249	1015
85°	571	364	259



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	3.2
10°-20°	195.7	9.1
20°-30°	298.0	13.8
30°-40°	363.0	16.9
40°-50°	385.1	17.9
50°-60°	363.5	16.9
60°-70°	293.5	13.6
70°-80°	159.2	7.4
80°-90°	25.8	1.2
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°	562.0	26.1
0°-40°	925.0	43.0
0°-60°	1673.6	77.8
0°-90°	2152.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2152.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	721	719	714	719	717	68
15°	694	692	690	696	696	196
25°	644	642	644	650	652	296
35°	570	573	578	590	591	356
45°	476	482	497	516	524	366
55°	361	376	410	437	447	323
65°	234	262	309	334	341	231
75°	102	150	171	155	150	112
85°	18	20	12	10	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.8	720.8	720.8	720.8	720.8
2.5°	724.1	720.8	715.7	720.8	719.1
5°	720.8	719.1	714.0	719.1	717.4
7.5°	715.7	715.7	710.7	714.0	714.0
10°	710.7	709.0	705.6	710.7	709.0
12.5°	702.3	700.6	698.9	704.0	702.3
15°	693.9	692.2	690.5	695.6	695.6
17.5°	683.8	682.1	680.4	687.2	687.2
20°	670.4	670.4	670.4	677.1	675.4
22.5°	656.9	656.9	658.6	665.3	663.6
25°	643.5	641.8	643.5	650.2	651.9
27.5°	626.7	628.4	630.0	636.8	638.4
30°	609.9	611.6	613.2	621.6	623.3
32.5°	589.7	593.1	596.4	606.5	606.5
35°	569.6	572.9	578.0	589.7	591.4
37.5°	547.7	551.1	557.8	571.2	574.6
40°	524.2	529.2	539.3	552.8	557.8
42.5°	500.7	507.4	519.1	534.3	541.0
45°	475.5	482.2	497.3	515.8	524.2
47.5°	448.6	457.0	475.5	499.0	505.7
50°	420.0	431.8	453.6	478.8	487.2
52.5°	391.5	404.9	431.8	458.7	467.1
55°	361.2	376.3	409.9	436.8	446.9
57.5°	331.0	347.8	386.4	415.0	425.1
60°	299.1	319.2	361.2	389.8	398.2
62.5°	267.1	290.7	336.0	364.6	371.3
65°	233.5	262.1	309.1	334.3	341.1
67.5°	201.6	235.2	282.3	300.7	300.7
70°	168.0	205.0	252.0	257.1	247.0
72.5°	134.4	176.4	218.4	199.9	191.5
75°	102.5	149.5	171.4	154.6	149.5
77.5°	77.3	121.0	121.0	110.9	107.5
80°	53.8	92.4	80.6	70.6	65.5
82.5°	35.3	52.1	42.0	33.6	28.6
85°	18.5	20.2	11.8	10.1	8.4
87.5°	6.7	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)