

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: P274846

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L950-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: P274846
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-RDP-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (392) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4618.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

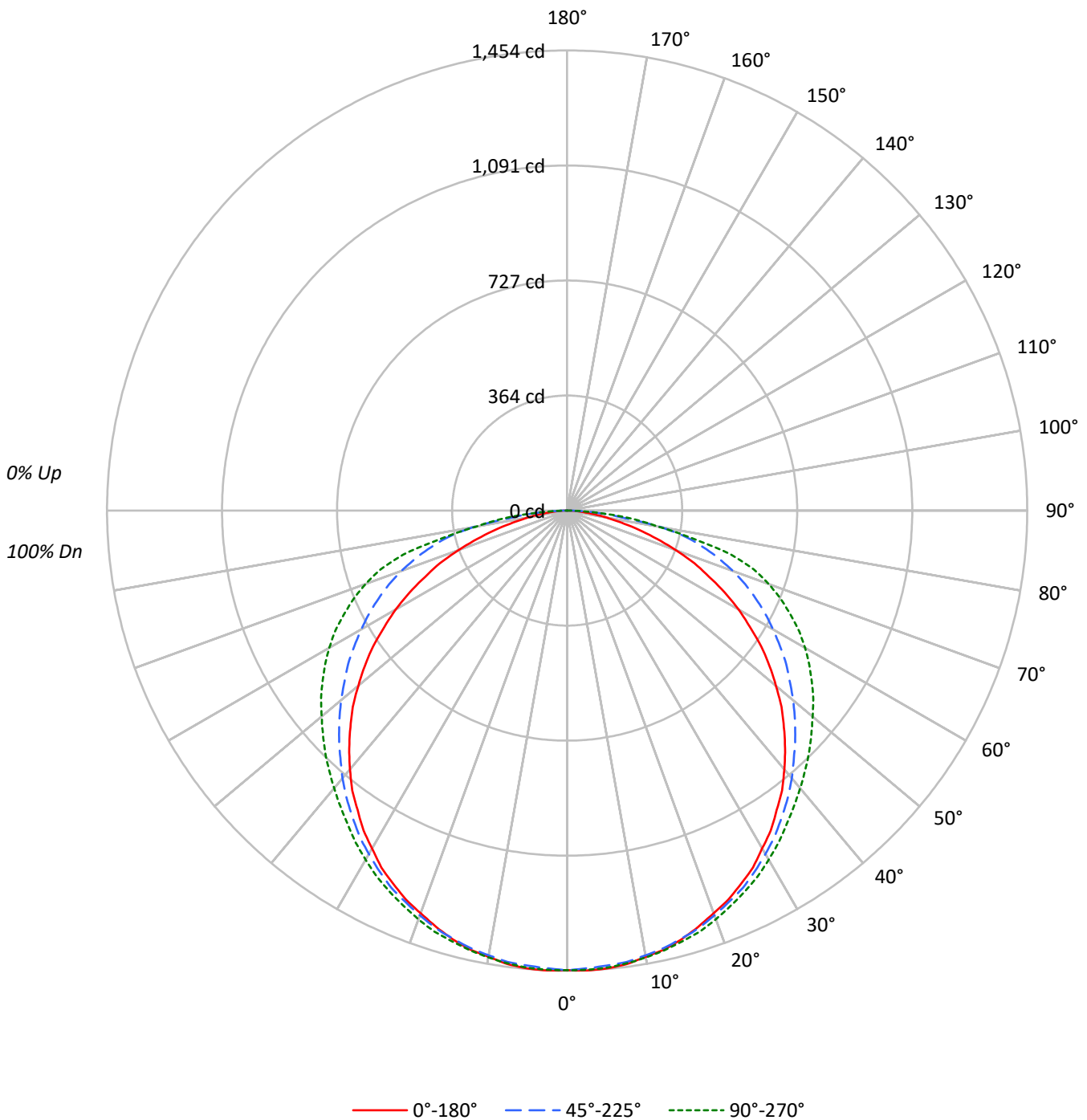
Input Watts (W): 55.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89		92	89	87		88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1954	1954	1954
5°	1961	1949	1958
10°	1956	1950	1959
15°	1953	1949	1962
20°	1938	1948	1968
25°	1932	1952	1972
30°	1915	1947	1979
35°	1896	1941	1986
40°	1875	1939	2012
45°	1844	1940	2057
50°	1803	1951	2119
55°	1757	1983	2214
60°	1683	2022	2336
65°	1575	2093	2479
70°	1433	2190	2667
75°	1214	2310	2786
80°	958	2325	2254
85°	707	1768	1981



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	3.0
10°-20°	396.5	8.6
20°-30°	606.3	13.1
30°-40°	741.2	16.0
40°-50°	789.9	17.1
50°-60°	755.3	16.4
60°-70°	639.8	13.9
70°-80°	430.0	9.3
80°-90°	121.3	2.6
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°	1140.5	24.7
0°-40°	1881.7	40.7
0°-60°	3426.9	74.2
0°-90°	4618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1452	1450	1443	1450	1450	138
15°	1402	1402	1400	1411	1409	395
25°	1301	1306	1315	1326	1328	600
35°	1154	1164	1182	1205	1209	723
45°	969	985	1019	1063	1081	747
55°	749	776	845	912	944	667
65°	495	545	657	744	779	491
75°	234	318	444	520	536	250
85°	46	94	114	124	128	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.2	1452.2	1452.2	1452.2	1452.2
2.5°	1454.5	1454.5	1447.6	1452.2	1452.2
5°	1452.2	1449.9	1443.1	1449.9	1449.9
7.5°	1445.4	1443.1	1438.5	1445.4	1443.1
10°	1431.6	1431.6	1427.0	1433.9	1433.9
12.5°	1420.2	1417.9	1415.6	1424.7	1422.5
15°	1401.8	1401.8	1399.5	1411.0	1408.7
17.5°	1378.9	1381.2	1383.5	1392.7	1395.0
20°	1353.7	1358.3	1360.6	1374.3	1374.3
22.5°	1330.8	1333.1	1337.7	1351.4	1351.4
25°	1301.1	1305.6	1314.8	1326.2	1328.5
27.5°	1271.3	1273.6	1285.0	1301.1	1303.3
30°	1232.3	1239.2	1252.9	1271.3	1273.6
32.5°	1198.0	1204.8	1220.9	1239.2	1243.8
35°	1154.5	1163.6	1181.9	1204.8	1209.4
37.5°	1115.5	1122.4	1145.3	1170.5	1177.4
40°	1067.4	1081.2	1104.1	1133.8	1145.3
42.5°	1019.3	1033.1	1060.5	1099.5	1113.2
45°	968.9	985.0	1019.3	1062.8	1081.2
47.5°	918.5	936.8	975.8	1026.2	1046.8
50°	861.3	884.2	932.3	989.5	1012.4
52.5°	806.3	833.8	886.5	950.6	980.4
55°	749.0	776.5	845.2	911.7	943.7
57.5°	684.9	721.5	797.1	872.7	907.1
60°	625.3	659.7	751.3	833.8	868.1
62.5°	561.2	607.0	705.5	792.5	826.9
65°	494.8	545.2	657.4	744.4	778.8
67.5°	435.2	490.2	609.3	696.3	730.7
70°	364.2	432.9	556.6	643.7	678.0
72.5°	297.8	373.4	501.6	586.4	618.5
75°	233.6	318.4	444.4	520.0	536.0
77.5°	174.1	263.4	384.8	416.9	405.4
80°	123.7	210.7	300.1	284.0	290.9
82.5°	80.2	160.3	185.5	210.7	217.6
85°	45.8	93.9	114.5	123.7	128.3
87.5°	20.6	34.4	45.8	45.8	43.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)