

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: P274843

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L930-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: P274843
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-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (392) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4202.0 lumens
Efficiency: N/A
Efficacy: 75.8 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

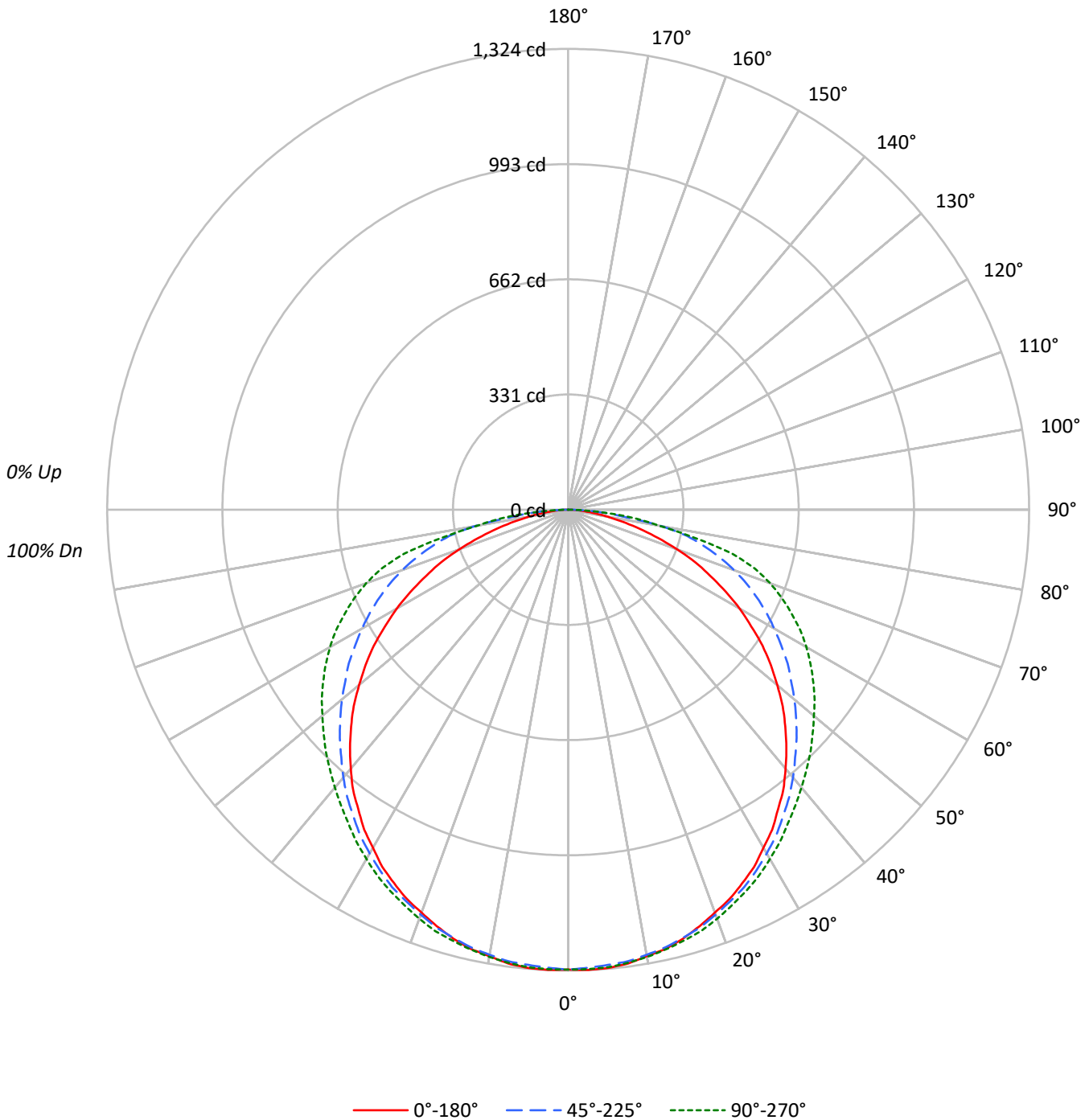
Input Watts (W): 55.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1778	1778	1778
5°	1785	1774	1782
10°	1780	1774	1783
15°	1777	1774	1785
20°	1764	1773	1791
25°	1757	1776	1795
30°	1742	1771	1800
35°	1725	1767	1808
40°	1706	1764	1830
45°	1678	1765	1872
50°	1640	1776	1928
55°	1599	1804	2014
60°	1531	1840	2126
65°	1433	1904	2256
70°	1304	1993	2427
75°	1105	2102	2535
80°	872	2115	2051
85°	644	1609	1802



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.3	3.0
10°-20°	360.8	8.6
20°-30°	551.7	13.1
30°-40°	674.4	16.0
40°-50°	718.8	17.1
50°-60°	687.2	16.4
60°-70°	582.2	13.9
70°-80°	391.3	9.3
80°-90°	110.4	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°	1037.8	24.7
0°-40°	1712.2	40.7
0°-60°	3118.2	74.2
0°-90°	4202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1321	1319	1313	1319	1319	126
15°	1276	1276	1274	1284	1282	360
25°	1184	1188	1196	1207	1209	546
35°	1050	1059	1076	1096	1100	658
45°	882	896	928	967	984	680
55°	682	707	769	830	859	607
65°	450	496	598	677	709	447
75°	213	290	404	473	488	228
85°	42	86	104	112	117	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1321.4	1321.4	1321.4	1321.4	1321.4
2.5°	1323.5	1323.5	1317.2	1321.4	1321.4
5°	1321.4	1319.3	1313.1	1319.3	1319.3
7.5°	1315.2	1313.1	1308.9	1315.2	1313.1
10°	1302.7	1302.7	1298.5	1304.7	1304.7
12.5°	1292.2	1290.1	1288.1	1296.4	1294.3
15°	1275.6	1275.6	1273.5	1283.9	1281.8
17.5°	1254.7	1256.8	1258.9	1267.2	1269.3
20°	1231.8	1236.0	1238.0	1250.5	1250.5
22.5°	1210.9	1213.0	1217.2	1229.7	1229.7
25°	1183.8	1188.0	1196.4	1206.8	1208.9
27.5°	1156.8	1158.8	1169.3	1183.8	1185.9
30°	1121.3	1127.6	1140.1	1156.8	1158.8
32.5°	1090.1	1096.3	1110.9	1127.6	1131.7
35°	1050.5	1058.8	1075.5	1096.3	1100.5
37.5°	1015.0	1021.3	1042.1	1065.0	1071.3
40°	971.3	983.8	1004.6	1031.7	1042.1
42.5°	927.5	940.0	965.0	1000.4	1012.9
45°	881.6	896.2	927.5	967.1	983.8
47.5°	835.8	852.5	887.9	933.7	952.5
50°	783.7	804.5	848.3	900.4	921.2
52.5°	733.7	758.7	806.6	865.0	892.1
55°	681.5	706.6	769.1	829.5	858.7
57.5°	623.2	656.5	725.3	794.1	825.4
60°	569.0	600.3	683.6	758.7	789.9
62.5°	510.6	552.3	641.9	721.1	752.4
65°	450.2	496.0	598.2	677.4	708.6
67.5°	396.0	446.0	554.4	633.6	664.9
70°	331.4	393.9	506.5	585.7	616.9
72.5°	271.0	339.7	456.4	533.6	562.7
75°	212.6	289.7	404.3	473.1	487.7
77.5°	158.4	239.7	350.2	379.3	368.9
80°	112.5	191.8	273.0	258.4	264.7
82.5°	72.9	145.9	168.8	191.8	198.0
85°	41.7	85.5	104.2	112.5	116.7
87.5°	18.8	31.3	41.7	41.7	39.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)