

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: P272110

Luminaire Tested: **24CZ2-65HE-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: P272110
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65HE-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (392) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5572.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

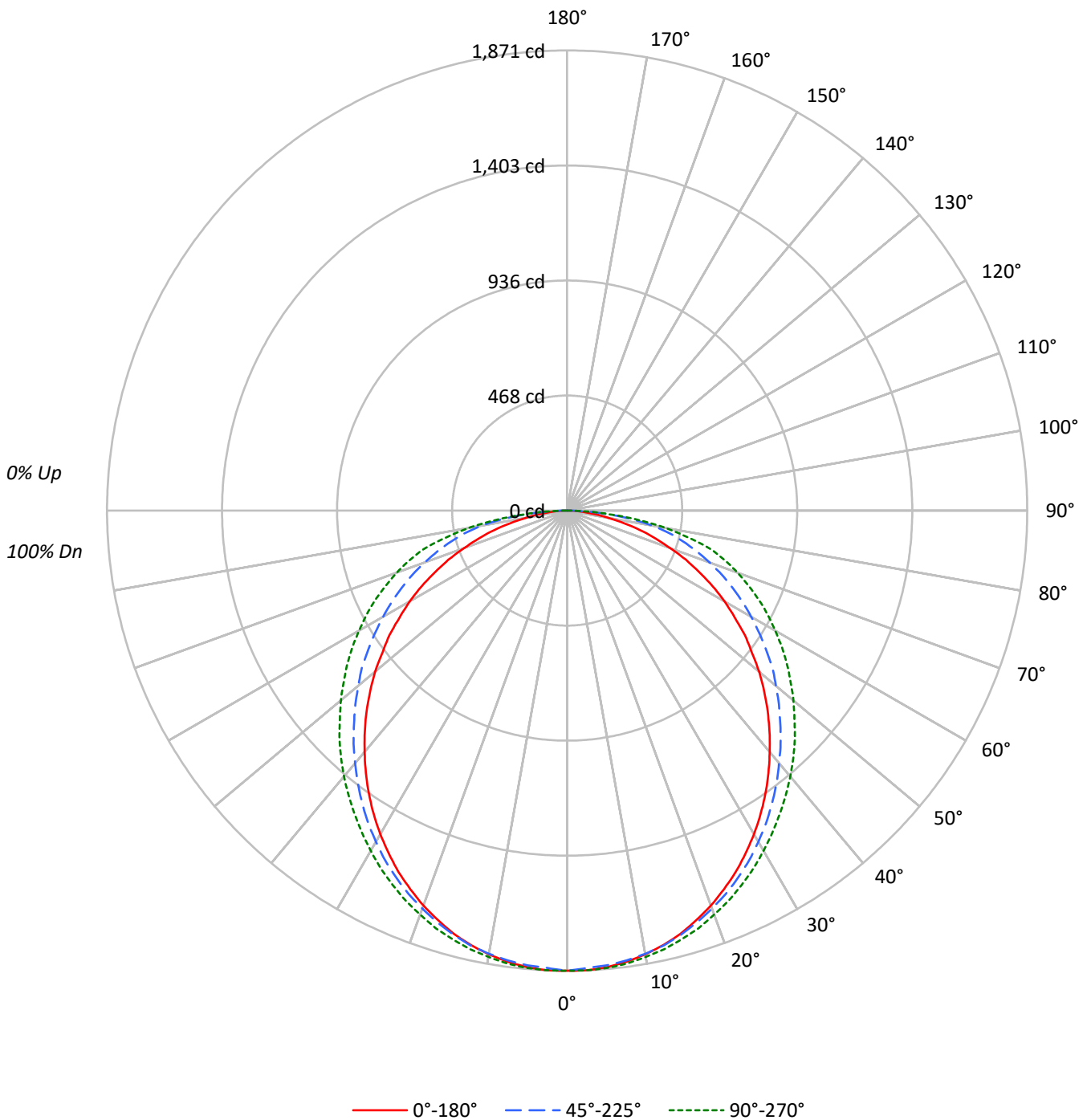
Input Watts (W): 48.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	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	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2517	2517	2517
5°	2517	2507	2522
10°	2503	2500	2518
15°	2482	2487	2513
20°	2447	2466	2503
25°	2407	2443	2493
30°	2360	2415	2482
35°	2309	2386	2474
40°	2250	2355	2479
45°	2194	2332	2491
50°	2133	2320	2515
55°	2068	2316	2561
60°	1987	2327	2627
65°	1883	2362	2741
70°	1748	2421	2897
75°	1595	2543	3142
80°	1311	2737	3141
85°	1005	2526	2699



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.9	3.2
10°-20°	505.1	9.1
20°-30°	760.1	13.6
30°-40°	910.9	16.3
40°-50°	949.3	17.0
50°-60°	883.2	15.9
60°-70°	727.4	13.1
70°-80°	495.4	8.9
80°-90°	163.5	2.9
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°	1442.2	25.9
0°-40°	2353.1	42.2
0°-60°	4185.6	75.1
0°-90°	5572.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5572.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1871	1871	1871	1871	1871	
5°	1863	1863	1856	1865	1867	177
15°	1782	1783	1785	1802	1804	502
25°	1622	1629	1646	1674	1679	747
35°	1406	1423	1452	1491	1506	879
45°	1153	1177	1226	1287	1309	889
55°	882	911	988	1066	1092	786
65°	591	642	742	829	861	587
75°	307	376	489	576	604	324
85°	65	126	164	175	175	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1870.8	1870.8	1870.8	1870.8	1870.8
2.5°	1870.8	1870.8	1861.5	1870.8	1870.8
5°	1863.3	1863.3	1855.9	1865.2	1867.1
7.5°	1850.3	1852.2	1844.7	1855.9	1857.8
10°	1831.7	1833.6	1829.9	1841.0	1842.9
12.5°	1809.4	1811.3	1811.3	1824.3	1826.1
15°	1781.5	1783.4	1785.2	1802.0	1803.8
17.5°	1746.2	1751.8	1755.5	1775.9	1779.7
20°	1709.0	1714.6	1722.0	1744.3	1748.0
22.5°	1666.2	1673.7	1686.7	1710.9	1716.4
25°	1621.6	1629.0	1645.8	1673.7	1679.2
27.5°	1571.4	1582.5	1603.0	1632.7	1640.2
30°	1519.3	1530.5	1554.6	1586.3	1597.4
32.5°	1463.5	1478.4	1506.3	1541.6	1552.8
35°	1405.9	1422.6	1452.4	1491.4	1506.3
37.5°	1344.5	1363.1	1398.4	1441.2	1459.8
40°	1281.3	1303.6	1340.8	1391.0	1411.5
42.5°	1218.1	1238.5	1285.0	1338.9	1361.2
45°	1153.0	1177.1	1225.5	1286.9	1309.2
47.5°	1086.0	1110.2	1167.8	1232.9	1253.4
50°	1019.1	1043.2	1108.3	1177.1	1201.3
52.5°	946.5	978.2	1052.5	1121.4	1145.5
55°	881.5	911.2	987.5	1065.6	1091.6
57.5°	807.1	842.4	926.1	1007.9	1035.8
60°	738.3	775.5	864.7	948.4	976.3
62.5°	667.6	708.5	803.4	888.9	920.5
65°	591.4	641.6	742.0	829.4	861.0
67.5°	522.6	574.6	680.6	769.9	797.8
70°	444.4	507.7	615.5	704.8	736.4
72.5°	377.5	440.7	554.2	641.6	673.2
75°	306.8	375.6	489.1	576.5	604.4
77.5°	236.2	312.4	425.9	492.8	502.1
80°	169.2	249.2	353.3	392.4	405.4
82.5°	119.0	191.5	260.3	286.4	293.8
85°	65.1	126.5	163.6	174.8	174.8
87.5°	27.9	53.9	65.1	66.9	68.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)