

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: P276495

Luminaire Tested: **24CZ2-45HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276495
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45HE-S-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4636.0 lumens
Efficiency: N/A
Efficacy: 143.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

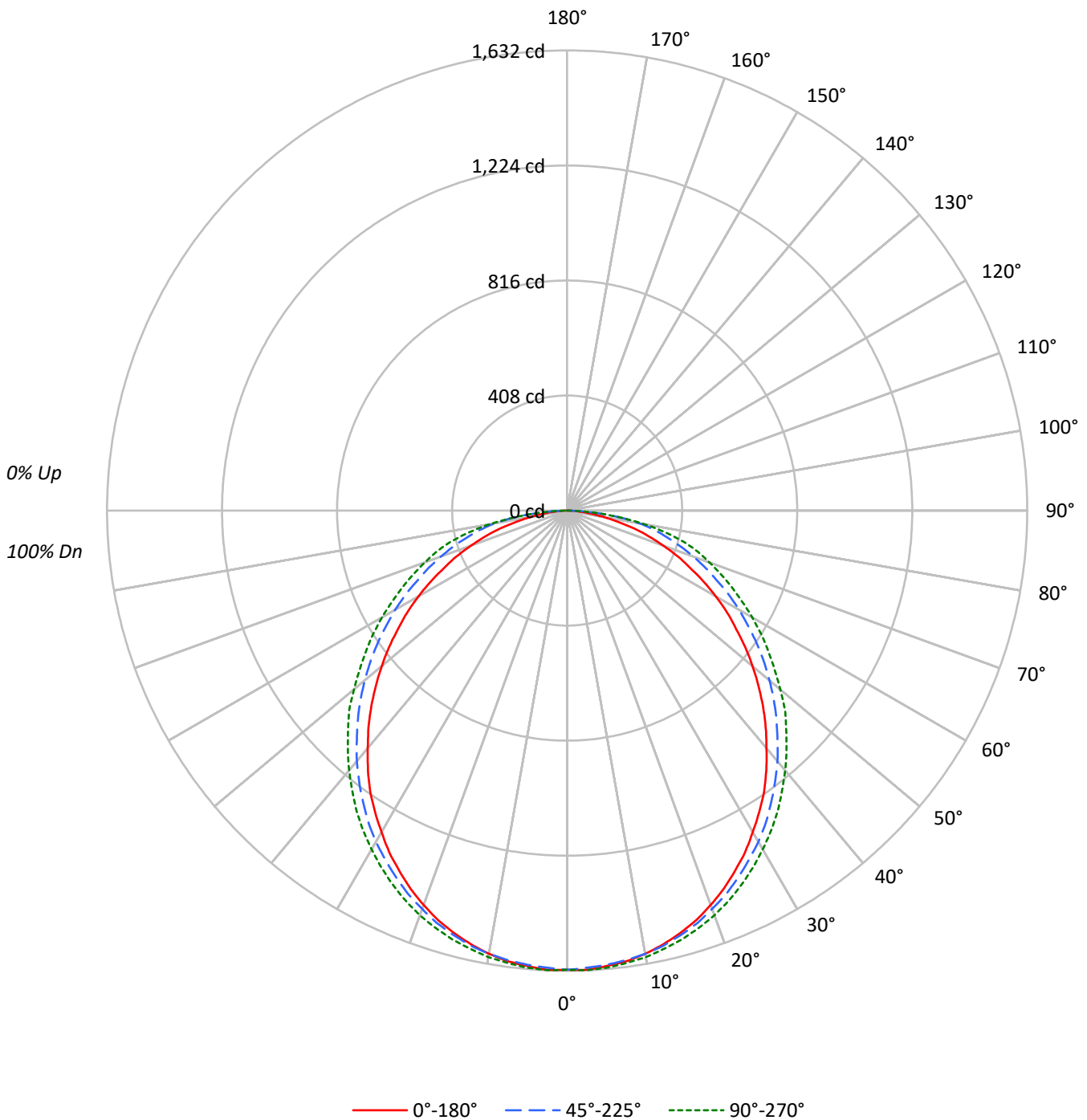
Input Watts (W): 32.271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2191	2191	2191
5°	2190	2184	2198
10°	2181	2181	2197
15°	2160	2170	2193
20°	2132	2153	2186
25°	2092	2131	2173
30°	2045	2107	2155
35°	2000	2073	2138
40°	1932	2038	2113
45°	1869	1998	2090
50°	1797	1960	2065
55°	1717	1924	2045
60°	1637	1894	2041
65°	1533	1861	2053
70°	1419	1871	2109
75°	1271	1906	2228
80°	1027	2019	2180
85°	773	1774	1727



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.2	3.3
10°-20°	440.6	9.5
20°-30°	662.3	14.3
30°-40°	788.9	17.0
40°-50°	807.4	17.4
50°-60°	726.9	15.7
60°-70°	570.8	12.3
70°-80°	370.5	8.0
80°-90°	114.6	2.5
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°	1257.0	27.1
0°-40°	2045.9	44.1
0°-60°	3580.1	77.2
0°-90°	4636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1629	1629	1629	1629	1629	
5°	1621	1624	1617	1626	1627	154
15°	1551	1555	1558	1571	1574	437
25°	1409	1421	1436	1459	1464	649
35°	1218	1232	1262	1293	1302	760
45°	982	1006	1050	1090	1098	757
55°	732	764	820	863	872	656
65°	482	518	585	633	645	479
75°	244	292	367	417	428	259
85°	50	93	115	112	112	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1628.7	1628.7	1628.7	1628.7	1628.7
2.5°	1630.1	1630.1	1622.8	1630.1	1631.6
5°	1621.3	1624.2	1616.9	1625.7	1627.2
7.5°	1612.5	1612.5	1608.0	1616.9	1618.3
10°	1596.3	1597.7	1596.3	1606.6	1608.0
12.5°	1575.6	1578.6	1580.1	1590.4	1591.8
15°	1550.6	1555.0	1558.0	1571.2	1574.2
17.5°	1522.6	1527.0	1534.4	1549.1	1552.1
20°	1488.8	1494.7	1503.5	1522.6	1527.0
22.5°	1451.9	1457.8	1472.6	1490.2	1497.6
25°	1409.2	1421.0	1435.7	1459.3	1463.7
27.5°	1366.5	1376.8	1396.0	1421.0	1426.9
30°	1316.5	1332.7	1356.2	1381.3	1387.2
32.5°	1267.9	1284.1	1312.1	1338.6	1345.9
35°	1217.8	1232.5	1262.0	1292.9	1301.7
37.5°	1160.4	1179.5	1211.9	1242.8	1251.7
40°	1100.0	1123.6	1160.4	1192.8	1203.1
42.5°	1042.6	1067.6	1104.4	1139.8	1151.5
45°	982.2	1005.8	1049.9	1089.7	1098.5
47.5°	920.4	946.9	994.0	1033.7	1048.5
50°	858.5	886.5	936.5	977.8	986.6
52.5°	796.7	826.1	879.1	923.3	927.7
55°	731.9	764.3	820.2	862.9	871.8
57.5°	673.0	700.9	761.3	805.5	815.8
60°	608.2	639.1	703.9	745.1	758.4
62.5°	546.3	578.7	646.5	687.7	699.5
65°	481.5	518.3	584.6	633.2	645.0
67.5°	425.6	460.9	531.6	578.7	590.5
70°	360.8	400.5	475.6	524.2	536.0
72.5°	304.8	346.1	421.2	468.3	485.9
75°	244.4	291.6	366.7	416.7	428.5
77.5°	185.5	240.0	316.6	354.9	354.9
80°	132.5	190.0	260.6	278.3	281.3
82.5°	86.9	142.8	192.9	191.4	191.4
85°	50.1	92.8	114.9	111.9	111.9
87.5°	19.1	38.3	41.2	41.2	39.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)