

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: P276584

Luminaire Tested: **24CZ2-45-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276584
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: 24CZ2-45-S-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4638.0 lumens
Efficiency: N/A
Efficacy: 129.5 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

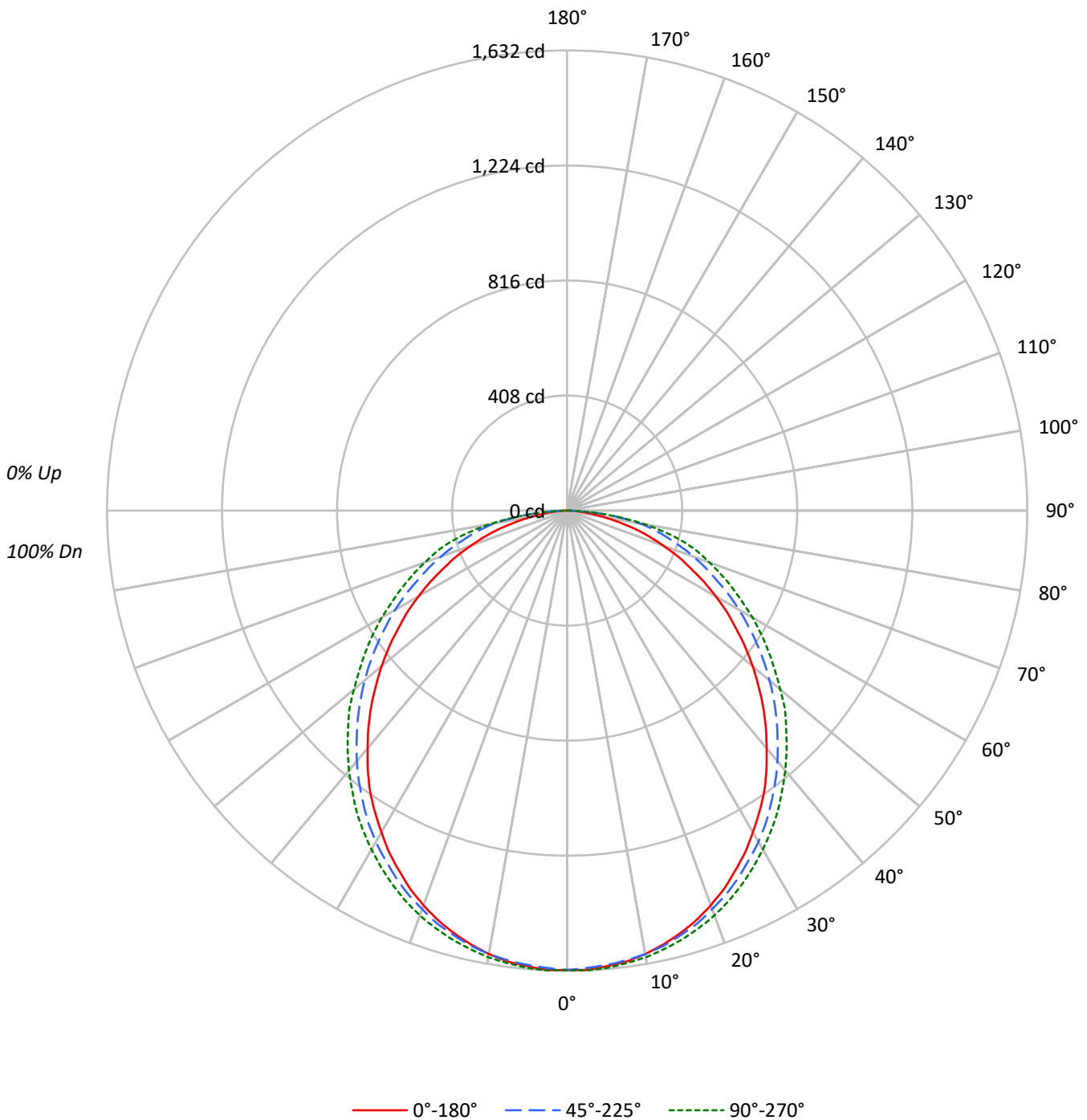
Input Watts (W): 35.805
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2192	2192	2192
5°	2191	2185	2199
10°	2182	2182	2198
15°	2161	2171	2194
20°	2133	2154	2187
25°	2093	2132	2174
30°	2046	2108	2156
35°	2001	2074	2139
40°	1933	2039	2114
45°	1870	1999	2091
50°	1798	1961	2066
55°	1718	1925	2046
60°	1637	1895	2042
65°	1534	1862	2054
70°	1420	1872	2109
75°	1272	1907	2229
80°	1027	2021	2180
85°	773	1774	1729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.3	3.3
10°-20°	440.8	9.5
20°-30°	662.5	14.3
30°-40°	789.2	17.0
40°-50°	807.7	17.4
50°-60°	727.2	15.7
60°-70°	571.1	12.3
70°-80°	370.6	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°	1257.5	27.1
0°-40°	2046.7	44.1
0°-60°	3581.6	77.2
0°-90°	4638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4638.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1629	1629	1629	1629	1629	
5°	1622	1625	1618	1626	1628	154
15°	1551	1556	1559	1572	1575	437
25°	1410	1422	1436	1460	1464	649
35°	1218	1233	1262	1294	1302	760
45°	983	1006	1050	1090	1099	758
55°	732	765	821	863	872	656
65°	482	519	585	634	645	480
75°	245	292	367	417	429	259
85°	50	93	115	112	112	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1629.4	1629.4	1629.4	1629.4	1629.4
2.5°	1630.8	1630.8	1623.5	1630.8	1632.3
5°	1622.0	1624.9	1617.6	1626.4	1627.9
7.5°	1613.1	1613.1	1608.7	1617.6	1619.0
10°	1596.9	1598.4	1596.9	1607.3	1608.7
12.5°	1576.3	1579.3	1580.7	1591.0	1592.5
15°	1551.3	1555.7	1558.6	1571.9	1574.8
17.5°	1523.3	1527.7	1535.1	1549.8	1552.7
20°	1489.4	1495.3	1504.1	1523.3	1527.7
22.5°	1452.6	1458.5	1473.2	1490.9	1498.2
25°	1409.8	1421.6	1436.4	1459.9	1464.4
27.5°	1367.1	1377.4	1396.6	1421.6	1427.5
30°	1317.0	1333.2	1356.8	1381.9	1387.7
32.5°	1268.4	1284.6	1312.6	1339.1	1346.5
35°	1218.3	1233.1	1262.5	1293.5	1302.3
37.5°	1160.9	1180.0	1212.4	1243.4	1252.2
40°	1100.5	1124.0	1160.9	1193.3	1203.6
42.5°	1043.0	1068.1	1104.9	1140.3	1152.0
45°	982.6	1006.2	1050.4	1090.2	1099.0
47.5°	920.7	947.3	994.4	1034.2	1048.9
50°	858.9	886.9	937.0	978.2	987.0
52.5°	797.0	826.5	879.5	923.7	928.1
55°	732.2	764.6	820.6	863.3	872.1
57.5°	673.2	701.2	761.6	805.8	816.1
60°	608.4	639.4	704.2	745.4	758.7
62.5°	546.6	579.0	646.7	688.0	699.8
65°	481.7	518.6	584.9	633.5	645.3
67.5°	425.8	461.1	531.8	579.0	590.8
70°	360.9	400.7	475.8	524.5	536.2
72.5°	305.0	346.2	421.3	468.5	486.2
75°	244.6	291.7	366.8	416.9	428.7
77.5°	185.6	240.1	316.7	355.0	355.0
80°	132.6	190.0	260.8	278.4	281.4
82.5°	86.9	142.9	193.0	191.5	191.5
85°	50.1	92.8	114.9	112.0	112.0
87.5°	19.2	38.3	41.2	41.2	39.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)