

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: P276331

Luminaire Tested: **24CZ2-45HE-S-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276331
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-L83050-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4726.0 lumens
Efficiency: N/A
Efficacy: 143.3 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

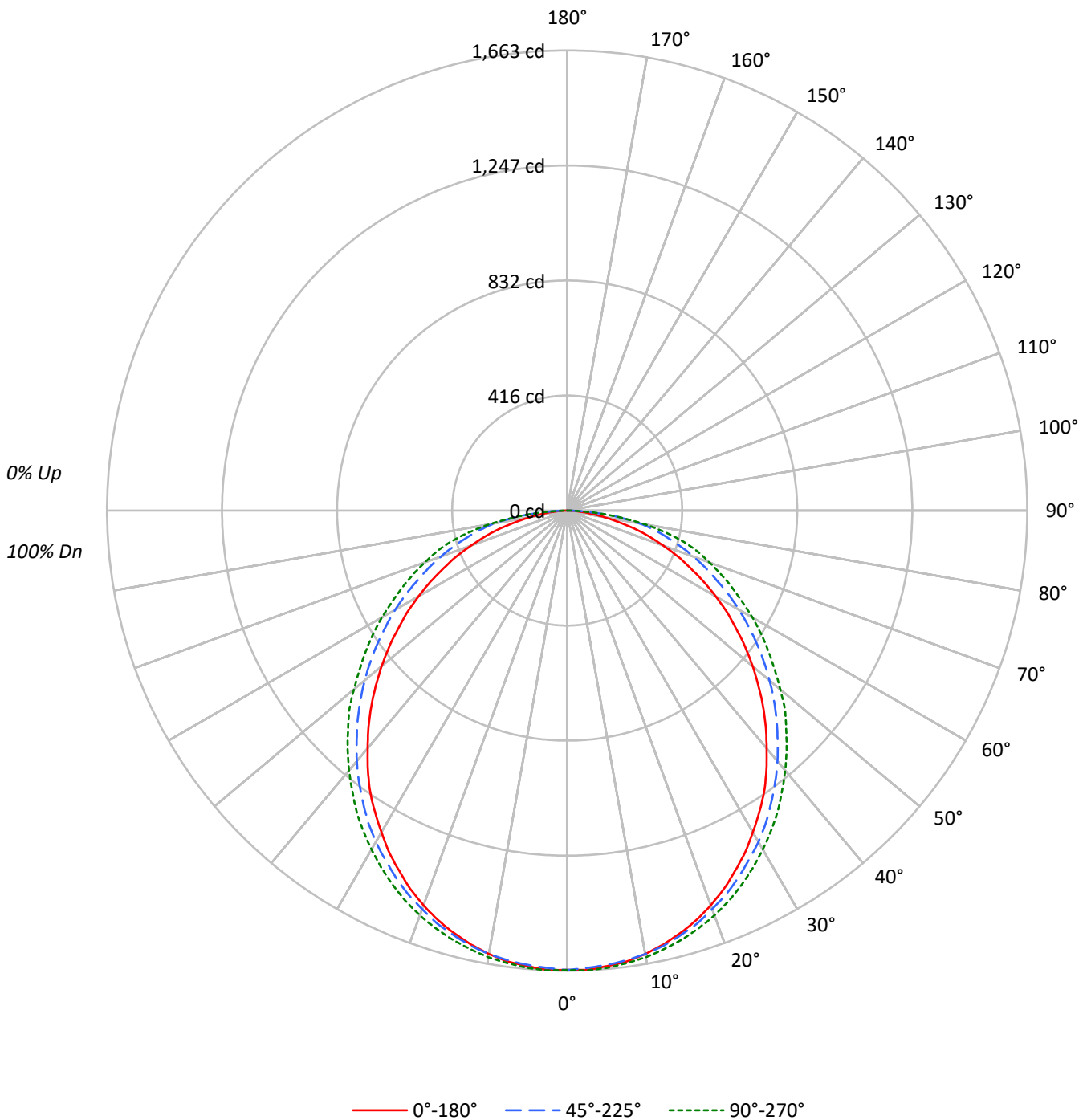
Input Watts (W): 32.974266
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2234	2234	2234
5°	2232	2226	2240
10°	2223	2223	2240
15°	2202	2212	2235
20°	2173	2195	2229
25°	2133	2173	2215
30°	2085	2148	2197
35°	2039	2113	2180
40°	1970	2078	2154
45°	1905	2037	2131
50°	1832	1998	2105
55°	1750	1961	2085
60°	1668	1931	2080
65°	1563	1897	2093
70°	1447	1908	2150
75°	1295	1943	2271
80°	1047	2059	2221
85°	787	1808	1761



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	3.3
10°-20°	449.1	9.5
20°-30°	675.1	14.3
30°-40°	804.2	17.0
40°-50°	823.0	17.4
50°-60°	741.0	15.7
60°-70°	581.9	12.3
70°-80°	377.7	8.0
80°-90°	116.8	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°	1281.4	27.1
0°-40°	2085.6	44.1
0°-60°	3649.6	77.2
0°-90°	4726.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4726.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1660	1660	1660	1660	1660	
5°	1653	1656	1648	1657	1659	157
15°	1581	1585	1588	1602	1605	446
25°	1437	1449	1464	1488	1492	662
35°	1242	1256	1286	1318	1327	774
45°	1001	1025	1070	1111	1120	772
55°	746	779	836	880	889	669
65°	491	528	596	646	658	489
75°	249	297	374	425	437	264
85°	51	95	117	114	114	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1660.3	1660.3	1660.3	1660.3	1660.3
2.5°	1661.8	1661.8	1654.3	1661.8	1663.3
5°	1652.8	1655.8	1648.3	1657.3	1658.8
7.5°	1643.8	1643.8	1639.3	1648.3	1649.8
10°	1627.2	1628.8	1627.2	1637.8	1639.3
12.5°	1606.2	1609.2	1610.7	1621.2	1622.7
15°	1580.7	1585.2	1588.2	1601.7	1604.7
17.5°	1552.2	1556.7	1564.2	1579.2	1582.2
20°	1517.7	1523.7	1532.7	1552.2	1556.7
22.5°	1480.1	1486.1	1501.2	1519.2	1526.7
25°	1436.6	1448.6	1463.6	1487.6	1492.1
27.5°	1393.1	1403.6	1423.1	1448.6	1454.6
30°	1342.0	1358.5	1382.6	1408.1	1414.1
32.5°	1292.5	1309.0	1337.5	1364.5	1372.1
35°	1241.5	1256.5	1286.5	1318.0	1327.0
37.5°	1182.9	1202.4	1235.4	1267.0	1276.0
40°	1121.4	1145.4	1182.9	1215.9	1226.4
42.5°	1062.8	1088.3	1125.9	1161.9	1173.9
45°	1001.3	1025.3	1070.3	1110.9	1119.9
47.5°	938.2	965.2	1013.3	1053.8	1068.8
50°	875.2	903.7	954.7	996.8	1005.8
52.5°	812.1	842.1	896.2	941.2	945.7
55°	746.1	779.1	836.1	879.7	888.7
57.5°	686.0	714.5	776.1	821.1	831.6
60°	620.0	651.5	717.6	759.6	773.1
62.5°	556.9	590.0	659.0	701.0	713.0
65°	490.9	528.4	596.0	645.5	657.5
67.5°	433.8	469.9	541.9	590.0	602.0
70°	367.8	408.3	484.9	534.4	546.4
72.5°	310.7	352.8	429.3	477.4	495.4
75°	249.2	297.2	373.8	424.8	436.8
77.5°	189.1	244.7	322.7	361.8	361.8
80°	135.1	193.6	265.7	283.7	286.7
82.5°	88.6	145.6	196.7	195.1	195.1
85°	51.0	94.6	117.1	114.1	114.1
87.5°	19.5	39.0	42.0	42.0	40.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)