

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: P276074

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276074
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: 24CZ2-45HE-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4368.6 lumens
Efficiency: N/A
Efficacy: 135.8 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

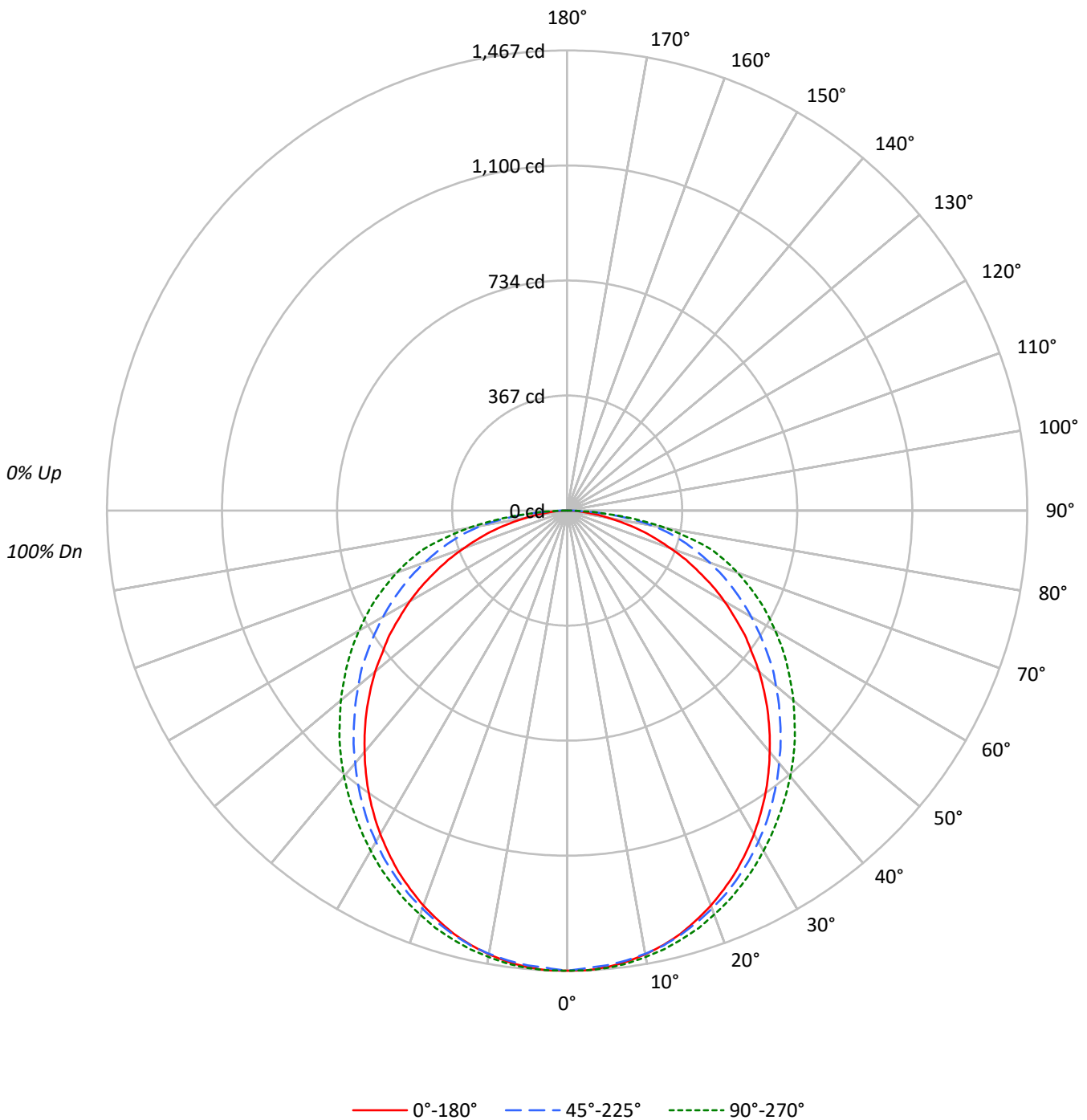
Input Watts (W): 32.178
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1974	1974	1974
5°	1973	1965	1977
10°	1962	1960	1974
15°	1946	1950	1970
20°	1919	1933	1962
25°	1887	1916	1955
30°	1851	1894	1946
35°	1811	1870	1940
40°	1764	1846	1944
45°	1720	1828	1953
50°	1672	1819	1972
55°	1621	1816	2008
60°	1558	1824	2060
65°	1476	1852	2149
70°	1371	1899	2271
75°	1251	1994	2464
80°	1028	2146	2462
85°	787	1981	2117



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	3.2
10°-20°	396.0	9.1
20°-30°	596.0	13.6
30°-40°	714.2	16.3
40°-50°	744.3	17.0
50°-60°	692.5	15.9
60°-70°	570.3	13.1
70°-80°	388.4	8.9
80°-90°	128.2	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°	1130.7	25.9
0°-40°	1844.9	42.2
0°-60°	3281.6	75.1
0°-90°	4368.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4368.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1461	1461	1455	1462	1464	139
15°	1397	1398	1400	1413	1414	394
25°	1271	1277	1290	1312	1317	585
35°	1102	1115	1139	1169	1181	689
45°	904	923	961	1009	1026	697
55°	691	714	774	835	856	616
65°	464	503	582	650	675	460
75°	241	294	384	452	474	254
85°	51	99	128	137	137	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1466.8	1466.8	1466.8	1466.8	1466.8
2.5°	1466.8	1466.8	1459.5	1466.8	1466.8
5°	1460.9	1460.9	1455.1	1462.4	1463.8
7.5°	1450.7	1452.2	1446.3	1455.1	1456.5
10°	1436.1	1437.6	1434.7	1443.4	1444.9
12.5°	1418.6	1420.1	1420.1	1430.3	1431.8
15°	1396.8	1398.2	1399.7	1412.8	1414.3
17.5°	1369.1	1373.4	1376.4	1392.4	1395.3
20°	1339.9	1344.3	1350.1	1367.6	1370.5
22.5°	1306.4	1312.2	1322.4	1341.4	1345.7
25°	1271.4	1277.2	1290.3	1312.2	1316.6
27.5°	1232.0	1240.8	1256.8	1280.1	1286.0
30°	1191.2	1199.9	1218.9	1243.7	1252.4
32.5°	1147.4	1159.1	1181.0	1208.7	1217.4
35°	1102.3	1115.4	1138.7	1169.3	1181.0
37.5°	1054.1	1068.7	1096.4	1130.0	1144.5
40°	1004.6	1022.1	1051.2	1090.6	1106.6
42.5°	955.0	971.0	1007.5	1049.8	1067.3
45°	904.0	922.9	960.8	1008.9	1026.4
47.5°	851.5	870.4	915.6	966.7	982.7
50°	799.0	817.9	869.0	922.9	941.9
52.5°	742.1	766.9	825.2	879.2	898.1
55°	691.1	714.4	774.2	835.4	855.8
57.5°	632.8	660.5	726.1	790.2	812.1
60°	578.8	608.0	678.0	743.6	765.5
62.5°	523.4	555.5	629.9	696.9	721.7
65°	463.6	503.0	581.7	650.3	675.1
67.5°	409.7	450.5	533.6	603.6	625.5
70°	348.5	398.0	482.6	552.6	577.4
72.5°	296.0	345.5	434.5	503.0	527.8
75°	240.6	294.5	383.5	452.0	473.9
77.5°	185.2	244.9	333.9	386.4	393.7
80°	132.7	195.4	277.0	307.6	317.8
82.5°	93.3	150.2	204.1	224.5	230.4
85°	51.0	99.1	128.3	137.1	137.1
87.5°	21.9	42.3	51.0	52.5	53.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)