

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: P276209

Luminaire Tested: **24CZ2-45HE-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276209
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-L92765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3922.1 lumens
Efficiency: N/A
Efficacy: 121.9 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

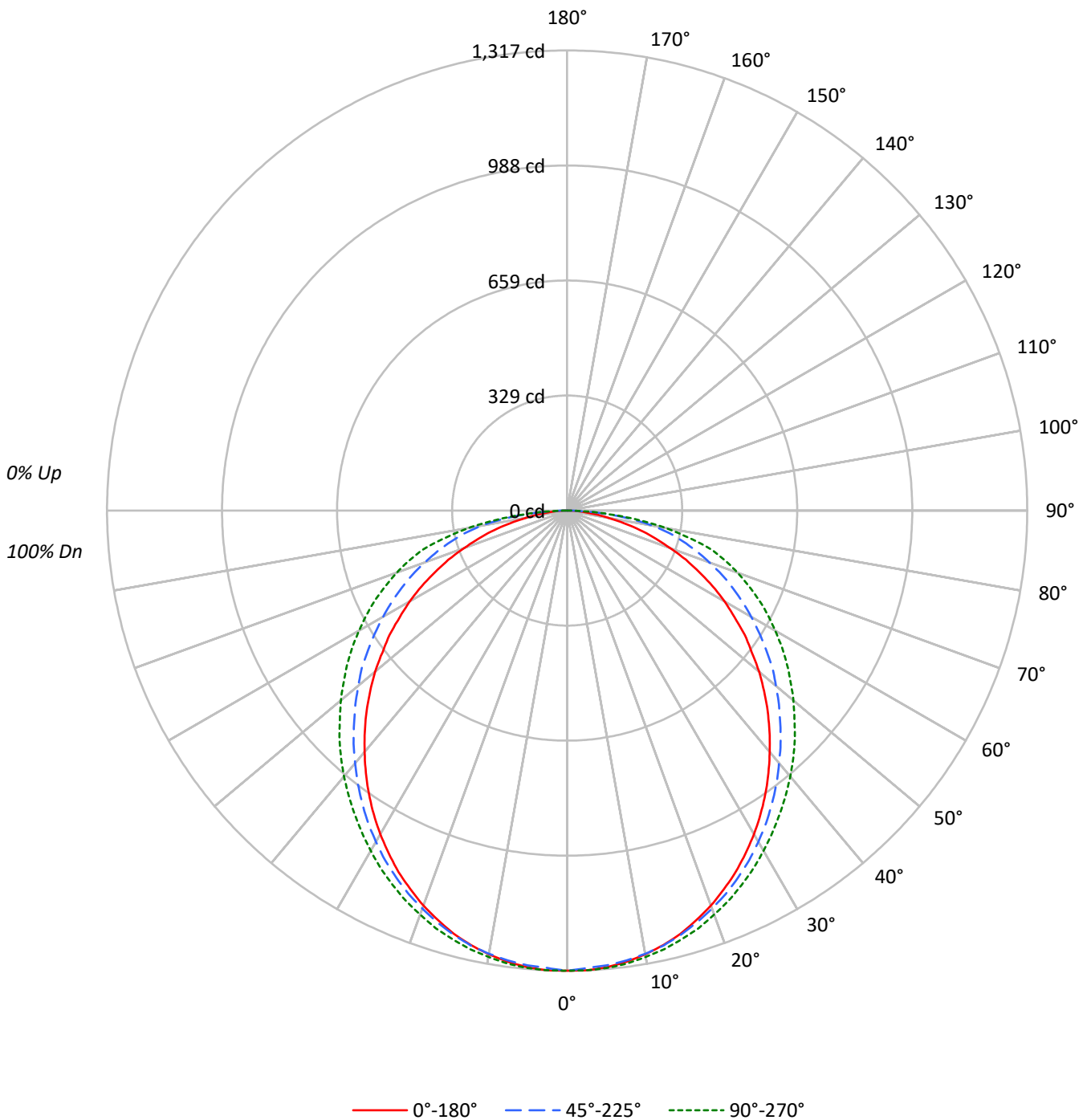
Input Watts (W): 32.178
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1772	1772	1772
5°	1771	1764	1775
10°	1762	1760	1772
15°	1747	1750	1769
20°	1723	1736	1762
25°	1695	1720	1755
30°	1661	1700	1747
35°	1625	1679	1742
40°	1584	1658	1745
45°	1544	1641	1753
50°	1501	1633	1770
55°	1456	1631	1803
60°	1399	1638	1849
65°	1325	1663	1930
70°	1231	1705	2039
75°	1123	1790	2211
80°	923	1927	2211
85°	707	1778	1899



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	3.2
10°-20°	355.6	9.1
20°-30°	535.0	13.6
30°-40°	641.2	16.3
40°-50°	668.2	17.0
50°-60°	621.7	15.9
60°-70°	512.0	13.1
70°-80°	348.7	8.9
80°-90°	115.1	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°	1015.1	25.9
0°-40°	1656.4	42.2
0°-60°	2946.2	75.1
0°-90°	3922.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3922.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1317	1317	1317	1317	1317	
5°	1312	1312	1306	1313	1314	124
15°	1254	1255	1257	1268	1270	353
25°	1141	1147	1158	1178	1182	525
35°	990	1001	1022	1050	1060	619
45°	812	829	863	906	922	626
55°	620	641	695	750	768	553
65°	416	452	522	584	606	413
75°	216	264	344	406	425	228
85°	46	89	115	123	123	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.8	1316.8	1316.8	1316.8	1316.8
2.5°	1316.8	1316.8	1310.3	1316.8	1316.8
5°	1311.6	1311.6	1306.4	1312.9	1314.2
7.5°	1302.4	1303.7	1298.5	1306.4	1307.7
10°	1289.3	1290.7	1288.0	1295.9	1297.2
12.5°	1273.6	1274.9	1274.9	1284.1	1285.4
15°	1254.0	1255.3	1256.6	1268.4	1269.7
17.5°	1229.1	1233.1	1235.7	1250.1	1252.7
20°	1203.0	1206.9	1212.1	1227.8	1230.4
22.5°	1172.8	1178.1	1187.2	1204.3	1208.2
25°	1141.4	1146.7	1158.4	1178.1	1182.0
27.5°	1106.1	1113.9	1128.3	1149.3	1154.5
30°	1069.4	1077.3	1094.3	1116.6	1124.4
32.5°	1030.2	1040.6	1060.3	1085.1	1093.0
35°	989.6	1001.4	1022.3	1049.8	1060.3
37.5°	946.4	959.5	984.4	1014.5	1027.6
40°	901.9	917.6	943.8	979.1	993.5
42.5°	857.4	871.8	904.5	942.5	958.2
45°	811.6	828.6	862.6	905.8	921.5
47.5°	764.4	781.5	822.0	867.9	882.3
50°	717.3	734.3	780.2	828.6	845.6
52.5°	666.3	688.5	740.9	789.3	806.3
55°	620.5	641.4	695.1	750.0	768.4
57.5°	568.1	593.0	651.9	709.5	729.1
60°	519.7	545.8	608.7	667.6	687.2
62.5°	469.9	498.7	565.5	625.7	647.9
65°	416.3	451.6	522.3	583.8	606.1
67.5°	367.8	404.5	479.1	541.9	561.6
70°	312.8	357.4	433.3	496.1	518.4
72.5°	265.7	310.2	390.1	451.6	473.9
75°	216.0	264.4	344.3	405.8	425.4
77.5°	166.2	219.9	299.8	346.9	353.4
80°	119.1	175.4	248.7	276.2	285.4
82.5°	83.8	134.8	183.3	201.6	206.8
85°	45.8	89.0	115.2	123.0	123.0
87.5°	19.6	38.0	45.8	47.1	48.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)