

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: P276496

Luminaire Tested: **24CZ2-45HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276496
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-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4647.9 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

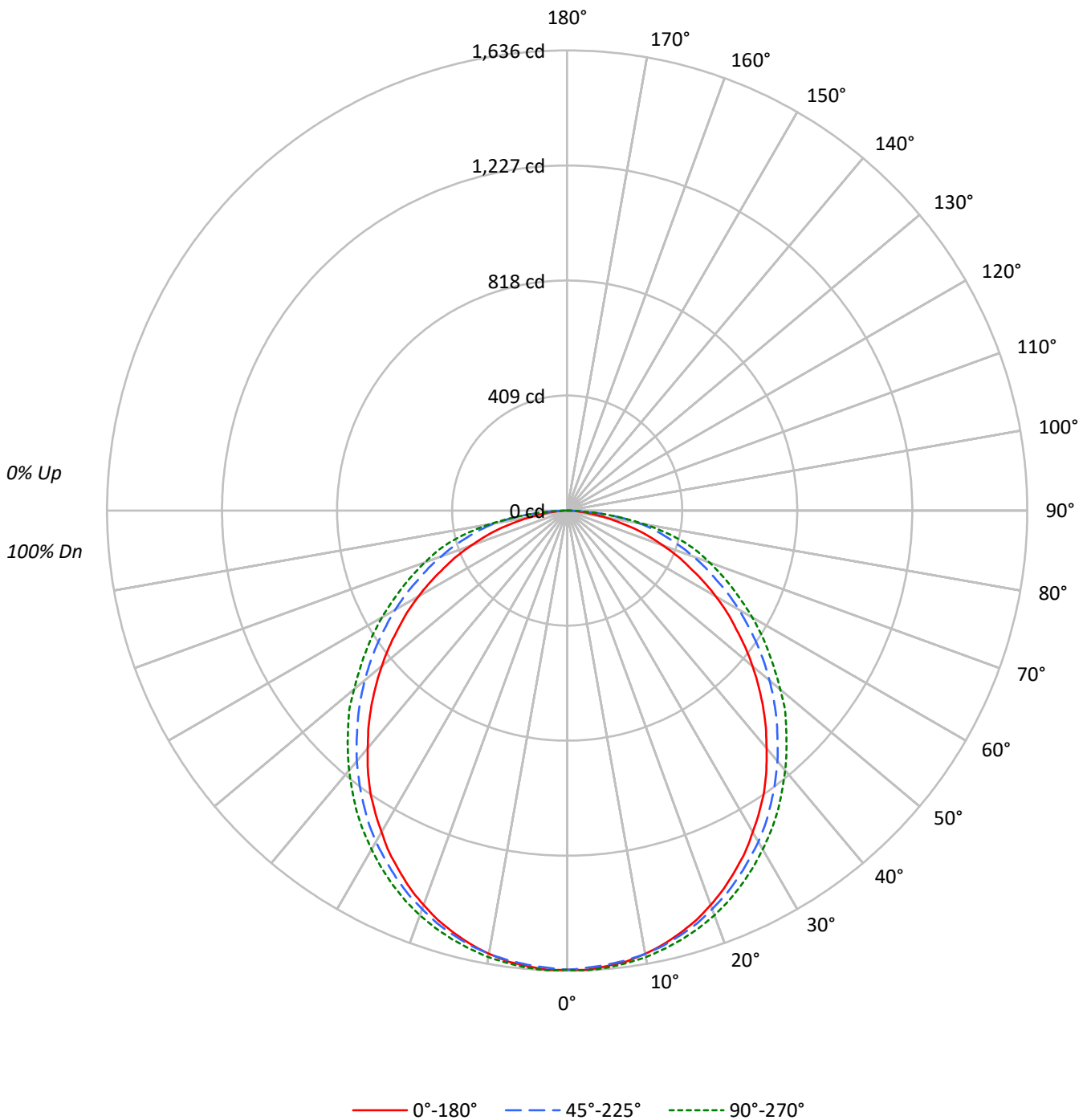
Input Watts (W): 32.271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276496

CATALOG NUMBER: 24CZ2-45HE-S-UNV-L82765-W2A1-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P276496

CATALOG NUMBER: 24CZ2-45HE-S-UNV-L82765-W2A1-U-5700K

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°	2197	2197	2197
5°	2195	2189	2203
10°	2187	2187	2203
15°	2165	2176	2198
20°	2137	2158	2192
25°	2098	2137	2179
30°	2051	2112	2161
35°	2005	2078	2144
40°	1937	2043	2119
45°	1874	2003	2096
50°	1802	1966	2071
55°	1721	1929	2050
60°	1641	1899	2046
65°	1537	1866	2059
70°	1423	1876	2114
75°	1274	1911	2233
80°	1030	2025	2185
85°	775	1778	1732



TEST NUMBER: P276496

CATALOG NUMBER: 24CZ2-45HE-S-UNV-L82765-W2A1-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.6	3.3
10°-20°	441.7	9.5
20°-30°	664.0	14.3
30°-40°	790.9	17.0
40°-50°	809.4	17.4
50°-60°	728.7	15.7
60°-70°	572.3	12.3
70°-80°	371.4	8.0
80°-90°	114.9	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°	1260.3	27.1
0°-40°	2051.1	44.1
0°-60°	3589.3	77.2
0°-90°	4647.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4647.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1633	1633	1633	1633	1633	
5°	1626	1628	1621	1630	1631	154
15°	1555	1559	1562	1575	1578	438
25°	1413	1425	1439	1463	1468	651
35°	1221	1236	1265	1296	1305	762
45°	985	1008	1053	1092	1101	759
55°	734	766	822	865	874	658
65°	483	520	586	635	647	481
75°	245	292	368	418	430	259
85°	50	93	115	112	112	61
90°	0	0	0	0	0	



TEST NUMBER: P276496

CATALOG NUMBER: 24CZ2-45HE-S-UNV-L82765-W2A1-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1632.8	1632.8	1632.8	1632.8	1632.8
2.5°	1634.3	1634.3	1626.9	1634.3	1635.8
5°	1625.5	1628.4	1621.0	1629.9	1631.4
7.5°	1616.6	1616.6	1612.2	1621.0	1622.5
10°	1600.4	1601.8	1600.4	1610.7	1612.2
12.5°	1579.7	1582.6	1584.1	1594.5	1595.9
15°	1554.6	1559.0	1562.0	1575.3	1578.2
17.5°	1526.5	1531.0	1538.4	1553.1	1556.1
20°	1492.6	1498.5	1507.4	1526.5	1531.0
22.5°	1455.7	1461.6	1476.4	1494.1	1501.4
25°	1412.9	1424.7	1439.4	1463.1	1467.5
27.5°	1370.1	1380.4	1399.6	1424.7	1430.6
30°	1319.9	1336.1	1359.7	1384.8	1390.7
32.5°	1271.1	1287.4	1315.4	1342.0	1349.4
35°	1220.9	1235.7	1265.2	1296.2	1305.1
37.5°	1163.4	1182.6	1215.0	1246.0	1254.9
40°	1102.8	1126.5	1163.4	1195.8	1206.2
42.5°	1045.3	1070.4	1107.3	1142.7	1154.5
45°	984.7	1008.3	1052.6	1092.5	1101.4
47.5°	922.7	949.3	996.5	1036.4	1051.2
50°	860.7	888.8	939.0	980.3	989.2
52.5°	798.7	828.2	881.4	925.7	930.1
55°	733.7	766.2	822.3	865.1	874.0
57.5°	674.7	702.7	763.3	807.6	817.9
60°	609.7	640.7	705.7	747.0	760.3
62.5°	547.7	580.2	648.1	689.5	701.3
65°	482.8	519.7	586.1	634.8	646.6
67.5°	426.7	462.1	533.0	580.2	592.0
70°	361.7	401.6	476.9	525.6	537.4
72.5°	305.6	346.9	422.2	469.5	487.2
75°	245.1	292.3	367.6	417.8	429.6
77.5°	186.0	240.6	317.4	355.8	355.8
80°	132.9	190.4	261.3	279.0	282.0
82.5°	87.1	143.2	193.4	191.9	191.9
85°	50.2	93.0	115.2	112.2	112.2
87.5°	19.2	38.4	41.3	41.3	39.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)