

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: P276073

Luminaire Tested: **24CZ2-45HE-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276073
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-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4310.0 lumens
Efficiency: N/A
Efficacy: 134.7 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

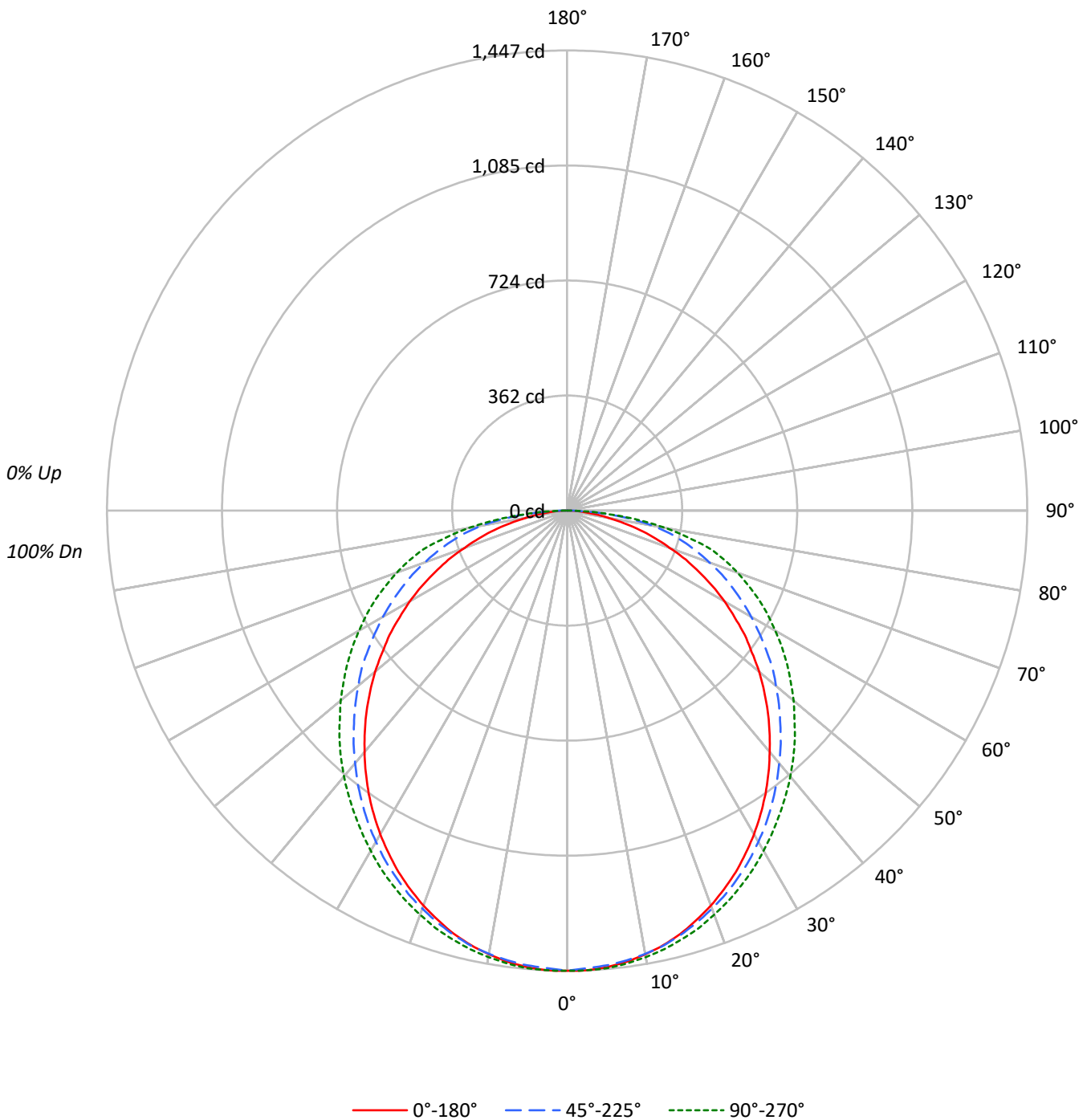
Input Watts (W): 31.992
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276073

CATALOG NUMBER: 24CZ2-45HE-UNV-L82765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P276073

CATALOG NUMBER: 24CZ2-45HE-UNV-L82765-W2A1-U-4500K

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°	1947	1947	1947
5°	1947	1939	1951
10°	1936	1934	1948
15°	1919	1924	1944
20°	1893	1907	1936
25°	1862	1890	1928
30°	1826	1868	1920
35°	1786	1845	1914
40°	1741	1822	1918
45°	1697	1804	1927
50°	1650	1795	1945
55°	1599	1792	1981
60°	1537	1800	2032
65°	1456	1827	2120
70°	1352	1873	2241
75°	1234	1967	2430
80°	1014	2118	2430
85°	777	1954	2087



TEST NUMBER: P276073

CATALOG NUMBER: 24CZ2-45HE-UNV-L82765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.9	3.2
10°-20°	390.7	9.1
20°-30°	588.0	13.6
30°-40°	704.6	16.3
40°-50°	734.3	17.0
50°-60°	683.2	15.9
60°-70°	562.7	13.1
70°-80°	383.2	8.9
80°-90°	126.5	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°	1115.5	25.9
0°-40°	1820.2	42.2
0°-60°	3237.6	75.1
0°-90°	4310.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4310.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1447	1447	1447	1447	1447	
5°	1441	1441	1436	1443	1444	137
15°	1378	1380	1381	1394	1395	388
25°	1254	1260	1273	1295	1299	577
35°	1088	1100	1123	1154	1165	680
45°	892	910	948	995	1013	688
55°	682	705	764	824	844	608
65°	457	496	574	642	666	454
75°	237	291	378	446	468	250
85°	50	98	127	135	135	62
90°	0	0	0	0	0	



TEST NUMBER: P276073

CATALOG NUMBER: 24CZ2-45HE-UNV-L82765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1447.1	1447.1	1447.1	1447.1	1447.1
2.5°	1447.1	1447.1	1439.9	1447.1	1447.1
5°	1441.3	1441.3	1435.6	1442.7	1444.2
7.5°	1431.2	1432.7	1426.9	1435.6	1437.0
10°	1416.9	1418.3	1415.4	1424.0	1425.5
12.5°	1399.6	1401.0	1401.0	1411.1	1412.5
15°	1378.0	1379.5	1380.9	1393.8	1395.3
17.5°	1350.7	1355.0	1357.9	1373.7	1376.6
20°	1321.9	1326.2	1332.0	1349.2	1352.1
22.5°	1288.8	1294.6	1304.7	1323.4	1327.7
25°	1254.3	1260.1	1273.0	1294.6	1298.9
27.5°	1215.5	1224.1	1239.9	1262.9	1268.7
30°	1175.2	1183.8	1202.5	1227.0	1235.6
32.5°	1132.0	1143.6	1165.1	1192.5	1201.1
35°	1087.5	1100.4	1123.4	1153.6	1165.1
37.5°	1040.0	1054.4	1081.7	1114.8	1129.2
40°	991.1	1008.3	1037.1	1075.9	1091.8
42.5°	942.2	958.0	994.0	1035.7	1052.9
45°	891.8	910.5	947.9	995.4	1012.7
47.5°	840.0	858.7	903.3	953.7	969.5
50°	788.3	807.0	857.3	910.5	929.2
52.5°	732.2	756.6	814.2	867.4	886.1
55°	681.8	704.8	763.8	824.2	844.4
57.5°	624.3	651.6	716.3	779.6	801.2
60°	571.1	599.8	668.9	733.6	755.2
62.5°	516.4	548.0	621.4	687.6	712.0
65°	457.4	496.3	573.9	641.5	666.0
67.5°	404.2	444.5	526.5	595.5	617.1
70°	343.8	392.7	476.1	545.2	569.6
72.5°	292.0	340.9	428.7	496.3	520.7
75°	237.3	290.6	378.3	445.9	467.5
77.5°	182.7	241.7	329.4	381.2	388.4
80°	130.9	192.7	273.3	303.5	313.6
82.5°	92.1	148.2	201.4	221.5	227.3
85°	50.3	97.8	126.6	135.2	135.2
87.5°	21.6	41.7	50.3	51.8	53.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)