

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: P276217

Luminaire Tested: **24CZ2-50HE-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276217
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: 24CZ2-50HE-UNV-L92765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4308.1 lumens
Efficiency: N/A
Efficacy: 118.5 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

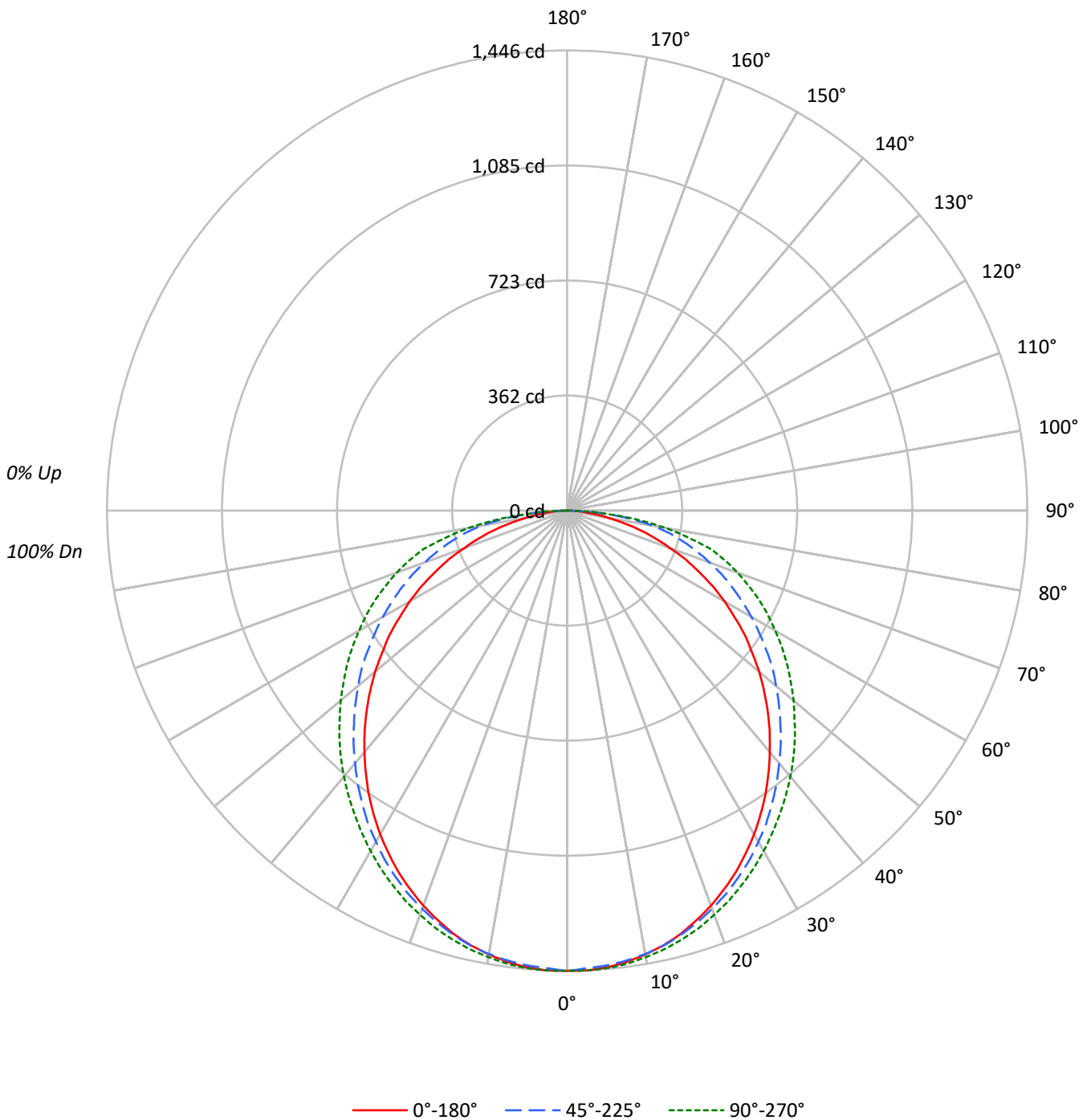
Input Watts (W): 36.363
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276217

CATALOG NUMBER: 24CZ2-50HE-UNV-L92765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P276217

CATALOG NUMBER: 24CZ2-50HE-UNV-L92765-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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56					56			
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1946	1946	1946
5°	1946	1938	1950
10°	1935	1933	1947
15°	1919	1923	1943
20°	1892	1906	1935
25°	1861	1889	1927
30°	1825	1867	1919
35°	1785	1844	1913
40°	1740	1821	1917
45°	1696	1803	1926
50°	1649	1794	1944
55°	1599	1791	1980
60°	1536	1799	2031
65°	1456	1826	2119
70°	1352	1872	2240
75°	1233	1966	2429
80°	1013	2117	2428
85°	777	1953	2087



TEST NUMBER: P276217

CATALOG NUMBER: 24CZ2-50HE-UNV-L92765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.2
10°-20°	390.5	9.1
20°-30°	587.7	13.6
30°-40°	704.3	16.3
40°-50°	734.0	17.0
50°-60°	682.9	15.9
60°-70°	562.4	13.1
70°-80°	383.0	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°	1115.0	25.9
0°-40°	1819.3	42.2
0°-60°	3236.2	75.1
0°-90°	4308.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4308.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1441	1441	1435	1442	1444	137
15°	1377	1379	1380	1393	1395	388
25°	1254	1260	1272	1294	1298	577
35°	1087	1100	1123	1153	1165	679
45°	891	910	948	995	1012	688
55°	682	704	764	824	844	607
65°	457	496	574	641	666	454
75°	237	290	378	446	467	250
85°	50	98	126	135	135	62
90°	0	0	0	0	0	



TEST NUMBER: P276217

CATALOG NUMBER: 24CZ2-50HE-UNV-L92765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1446.4	1446.4	1439.2	1446.4	1446.4
5°	1440.7	1440.7	1434.9	1442.1	1443.5
7.5°	1430.6	1432.0	1426.3	1434.9	1436.4
10°	1416.2	1417.7	1414.8	1423.4	1424.9
12.5°	1399.0	1400.4	1400.4	1410.5	1411.9
15°	1377.4	1378.8	1380.3	1393.2	1394.7
17.5°	1350.1	1354.4	1357.3	1373.1	1376.0
20°	1321.3	1325.6	1331.4	1348.7	1351.5
22.5°	1288.3	1294.0	1304.1	1322.8	1327.1
25°	1253.8	1259.5	1272.5	1294.0	1298.3
27.5°	1214.9	1223.6	1239.4	1262.4	1268.1
30°	1174.7	1183.3	1202.0	1226.4	1235.1
32.5°	1131.5	1143.0	1164.6	1191.9	1200.6
35°	1087.0	1099.9	1122.9	1153.1	1164.6
37.5°	1039.5	1053.9	1081.2	1114.3	1128.7
40°	990.6	1007.9	1036.7	1075.5	1091.3
42.5°	941.8	957.6	993.5	1035.2	1052.5
45°	891.4	910.1	947.5	995.0	1012.2
47.5°	839.7	858.4	902.9	953.3	969.1
50°	787.9	806.6	856.9	910.1	928.8
52.5°	731.8	756.3	813.8	867.0	885.7
55°	681.5	704.5	763.5	823.9	844.0
57.5°	624.0	651.3	716.0	779.3	800.9
60°	570.8	599.6	668.6	733.3	754.8
62.5°	516.2	547.8	621.1	687.3	711.7
65°	457.2	496.0	573.7	641.3	665.7
67.5°	404.0	444.3	526.2	595.2	616.8
70°	343.6	392.5	475.9	544.9	569.4
72.5°	291.9	340.8	428.5	496.0	520.5
75°	237.2	290.4	378.1	445.7	467.3
77.5°	182.6	241.5	329.3	381.0	388.2
80°	130.8	192.7	273.2	303.4	313.4
82.5°	92.0	148.1	201.3	221.4	227.2
85°	50.3	97.8	126.5	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)