

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: P276360

Luminaire Tested: **24CZ2-75HE-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276360
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: 24CZ2-75HE-S-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7942.0 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

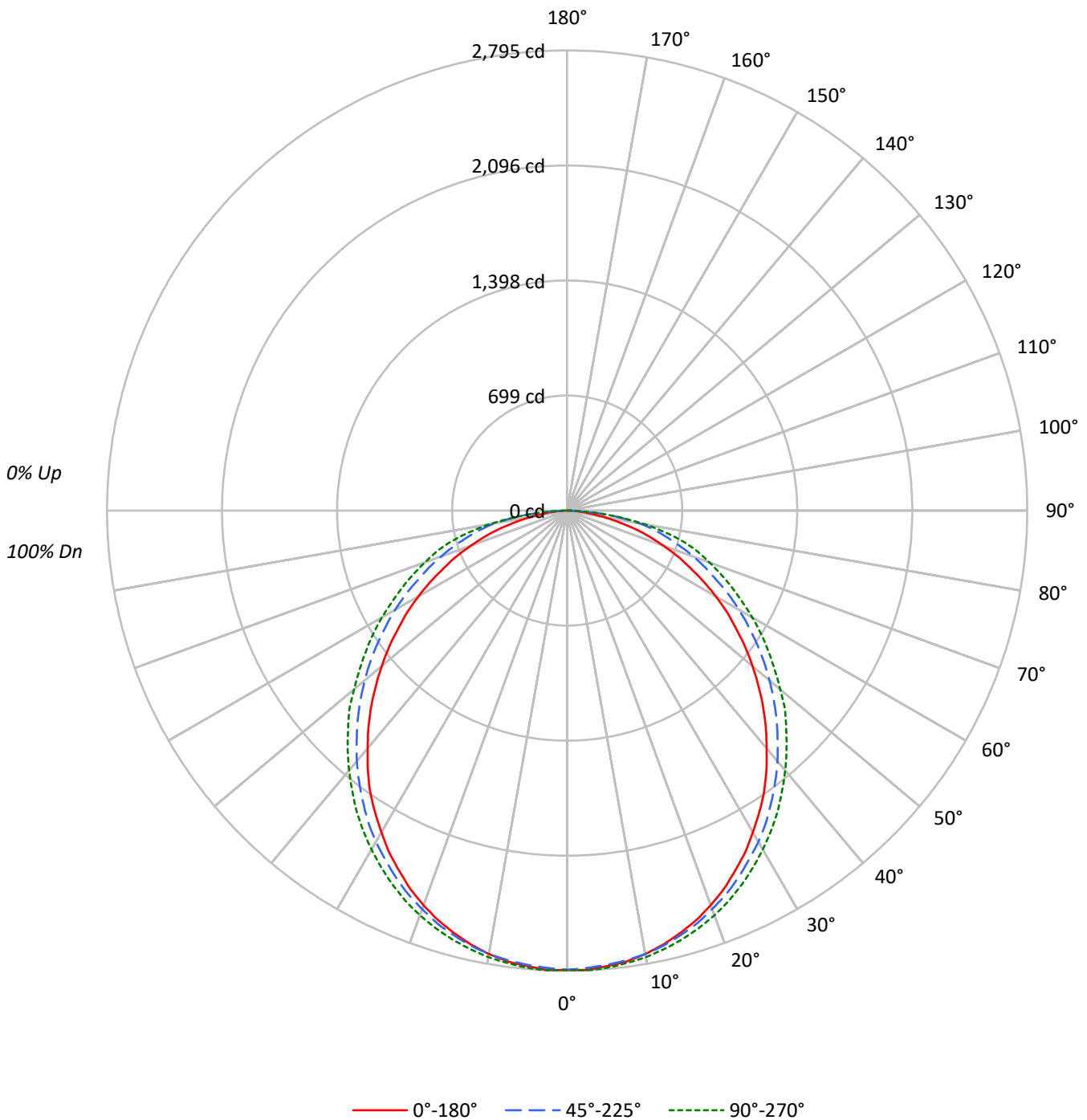
Input Watts (W): 61.265796
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276360

CATALOG NUMBER: 24CZ2-75HE-S-UNV-L83050-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P276360

CATALOG NUMBER: 24CZ2-75HE-S-UNV-L83050-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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3754	3754	3754
5°	3751	3741	3765
10°	3736	3736	3764
15°	3700	3718	3756
20°	3652	3688	3746
25°	3584	3651	3723
30°	3504	3610	3692
35°	3427	3551	3663
40°	3310	3492	3620
45°	3202	3423	3581
50°	3078	3358	3538
55°	2941	3296	3503
60°	2804	3245	3496
65°	2626	3188	3518
70°	2432	3205	3613
75°	2177	3265	3816
80°	1759	3460	3733
85°	1325	3038	2959



TEST NUMBER: P276360

CATALOG NUMBER: 24CZ2-75HE-S-UNV-L83050-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.1	3.3
10°-20°	754.7	9.5
20°-30°	1134.5	14.3
30°-40°	1351.4	17.0
40°-50°	1383.1	17.4
50°-60°	1245.2	15.7
60°-70°	977.9	12.3
70°-80°	634.7	8.0
80°-90°	196.3	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°	2153.4	27.1
0°-40°	3504.8	44.1
0°-60°	6133.2	77.2
0°-90°	7942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7942.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2790	2790	2790	2790	2790	
5°	2778	2782	2770	2785	2788	264
15°	2656	2664	2669	2692	2697	749
25°	2414	2434	2460	2500	2508	1112
35°	2086	2112	2162	2215	2230	1302
45°	1683	1723	1799	1867	1882	1297
55°	1254	1309	1405	1478	1493	1124
65°	825	888	1002	1085	1105	821
75°	419	500	628	714	734	443
85°	86	159	197	192	192	104
90°	0	0	0	0	0	



TEST NUMBER: P276360

CATALOG NUMBER: 24CZ2-75HE-S-UNV-L83050-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2790.1	2790.1	2790.1	2790.1	2790.1
2.5°	2792.6	2792.6	2780.0	2792.6	2795.1
5°	2777.5	2782.5	2769.9	2785.0	2787.6
7.5°	2762.3	2762.3	2754.8	2769.9	2772.4
10°	2734.6	2737.1	2734.6	2752.2	2754.8
12.5°	2699.3	2704.3	2706.8	2724.5	2727.0
15°	2656.4	2663.9	2669.0	2691.7	2696.7
17.5°	2608.4	2616.0	2628.6	2653.9	2658.9
20°	2550.4	2560.5	2575.6	2608.4	2616.0
22.5°	2487.4	2497.4	2522.7	2552.9	2565.6
25°	2414.2	2434.4	2459.6	2500.0	2507.5
27.5°	2341.0	2358.7	2391.5	2434.4	2444.5
30°	2255.3	2283.0	2323.4	2366.3	2376.4
32.5°	2172.0	2199.8	2247.7	2293.1	2305.7
35°	2086.3	2111.5	2161.9	2214.9	2230.0
37.5°	1987.9	2020.7	2076.2	2129.1	2144.3
40°	1884.4	1924.8	1987.9	2043.4	2061.0
42.5°	1786.1	1828.9	1892.0	1952.5	1972.7
45°	1682.6	1723.0	1798.7	1866.8	1881.9
47.5°	1576.7	1622.1	1702.8	1770.9	1796.1
50°	1470.7	1518.6	1604.4	1675.1	1690.2
52.5°	1364.8	1415.2	1506.0	1581.7	1589.3
55°	1253.8	1309.3	1405.1	1478.3	1493.4
57.5°	1152.9	1200.8	1304.2	1379.9	1397.6
60°	1041.9	1094.8	1205.8	1276.5	1299.2
62.5°	935.9	991.4	1107.5	1178.1	1198.3
65°	824.9	888.0	1001.5	1084.7	1104.9
67.5°	729.1	789.6	910.7	991.4	1011.6
70°	618.1	686.2	814.8	898.1	918.3
72.5°	522.2	592.8	721.5	802.2	832.5
75°	418.8	499.5	628.1	713.9	734.1
77.5°	317.9	411.2	542.4	608.0	608.0
80°	227.0	325.4	446.5	476.8	481.8
82.5°	148.8	244.7	330.5	327.9	327.9
85°	85.8	158.9	196.8	191.7	191.7
87.5°	32.8	65.6	70.6	70.6	68.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)