

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: P276358

Luminaire Tested: **24CZ2-75HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276358
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-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7493.0 lumens
Efficiency: N/A
Efficacy: 128.3 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

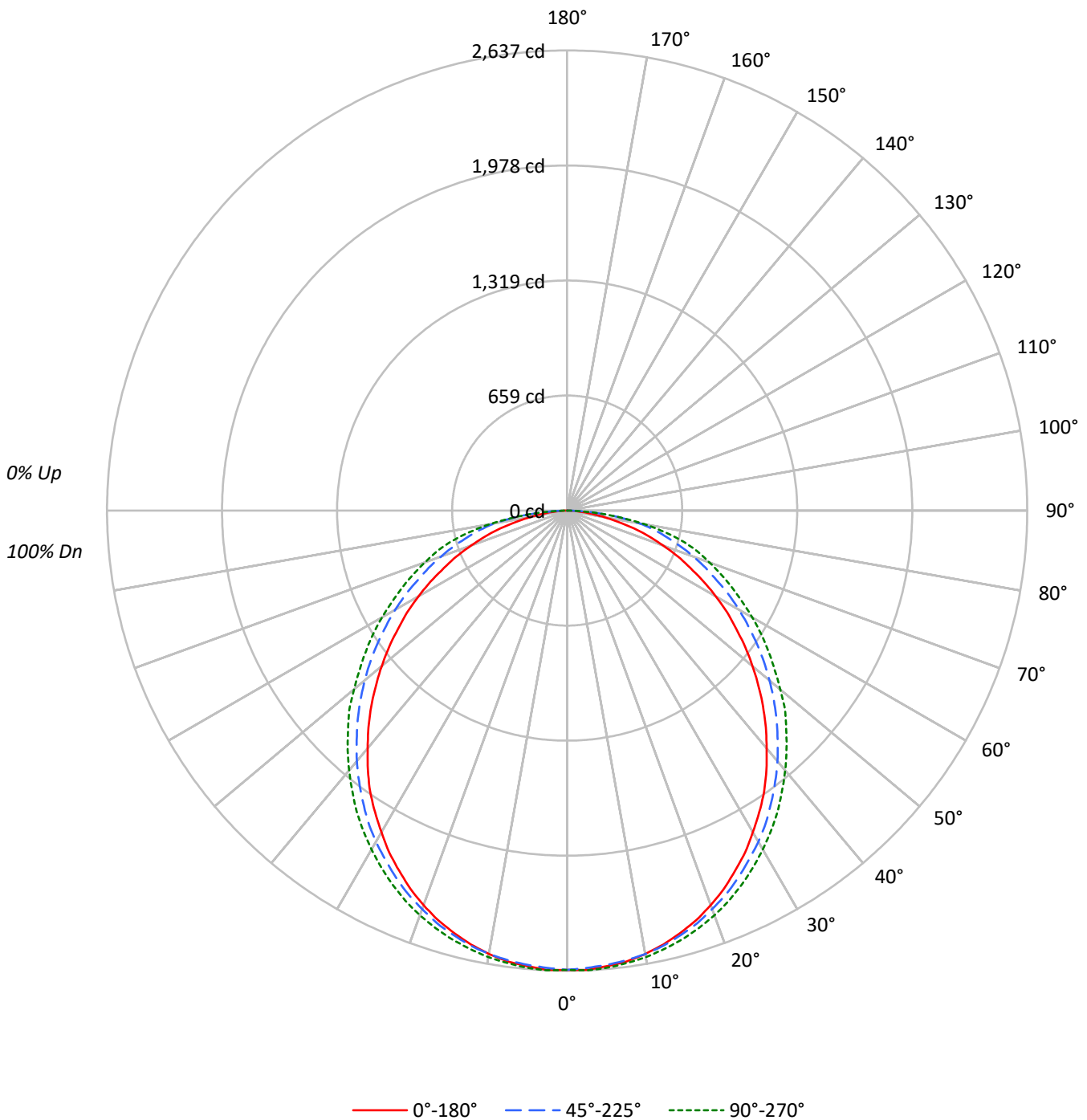
Input Watts (W): 58.404
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3542	3542	3542
5°	3539	3530	3552
10°	3525	3525	3551
15°	3491	3508	3544
20°	3445	3479	3534
25°	3381	3445	3512
30°	3306	3406	3483
35°	3233	3350	3456
40°	3123	3294	3415
45°	3021	3229	3378
50°	2905	3168	3338
55°	2775	3110	3305
60°	2645	3062	3298
65°	2478	3008	3319
70°	2294	3024	3408
75°	2054	3081	3601
80°	1660	3264	3522
85°	1249	2865	2793



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.2	3.3
10°-20°	712.1	9.5
20°-30°	1070.4	14.3
30°-40°	1275.0	17.0
40°-50°	1304.9	17.4
50°-60°	1174.8	15.7
60°-70°	922.6	12.3
70°-80°	598.8	8.0
80°-90°	185.2	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°	2031.7	27.1
0°-40°	3306.7	44.1
0°-60°	5786.4	77.2
0°-90°	7493.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7493.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2632	2632	2632	2632	2632	
5°	2620	2625	2613	2628	2630	249
15°	2506	2513	2518	2540	2544	707
25°	2278	2297	2321	2359	2366	1049
35°	1968	1992	2040	2090	2104	1228
45°	1588	1626	1697	1761	1776	1224
55°	1183	1235	1326	1395	1409	1060
65°	778	838	945	1023	1042	775
75°	395	471	593	674	693	418
85°	81	150	186	181	181	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2632.3	2632.3	2632.3	2632.3	2632.3
2.5°	2634.7	2634.7	2622.8	2634.7	2637.1
5°	2620.4	2625.2	2613.3	2627.6	2630.0
7.5°	2606.2	2606.2	2599.0	2613.3	2615.7
10°	2580.0	2582.4	2580.0	2596.6	2599.0
12.5°	2546.7	2551.4	2553.8	2570.5	2572.8
15°	2506.2	2513.3	2518.1	2539.5	2544.3
17.5°	2461.0	2468.1	2480.0	2503.8	2508.6
20°	2406.2	2415.8	2430.0	2461.0	2468.1
22.5°	2346.7	2356.3	2380.1	2408.6	2420.5
25°	2277.7	2296.8	2320.6	2358.6	2365.8
27.5°	2208.7	2225.4	2256.3	2296.8	2306.3
30°	2127.8	2153.9	2192.0	2232.5	2242.0
32.5°	2049.2	2075.4	2120.6	2163.5	2175.4
35°	1968.3	1992.1	2039.7	2089.7	2104.0
37.5°	1875.5	1906.4	1958.8	2008.8	2023.0
40°	1777.9	1816.0	1875.5	1927.8	1944.5
42.5°	1685.1	1725.5	1785.0	1842.2	1861.2
45°	1587.5	1625.6	1697.0	1761.2	1775.5
47.5°	1487.5	1530.4	1606.5	1670.8	1694.6
50°	1387.6	1432.8	1513.7	1580.4	1594.6
52.5°	1287.6	1335.2	1420.9	1492.3	1499.4
55°	1182.9	1235.2	1325.7	1394.7	1409.0
57.5°	1087.7	1132.9	1230.5	1301.9	1318.5
60°	983.0	1032.9	1137.7	1204.3	1225.7
62.5°	883.0	935.4	1044.8	1111.5	1130.5
65°	778.3	837.8	944.9	1023.4	1042.5
67.5°	687.8	745.0	859.2	935.4	954.4
70°	583.1	647.4	768.8	847.3	866.3
72.5°	492.7	559.3	680.7	756.9	785.4
75°	395.1	471.3	592.6	673.6	692.6
77.5°	299.9	387.9	511.7	573.6	573.6
80°	214.2	307.0	421.3	449.8	454.6
82.5°	140.4	230.9	311.8	309.4	309.4
85°	80.9	149.9	185.6	180.9	180.9
87.5°	30.9	61.9	66.6	66.6	64.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)