

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: P260659

Luminaire Tested: **24CZ-LD5-60-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260659
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-60-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5537.4 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

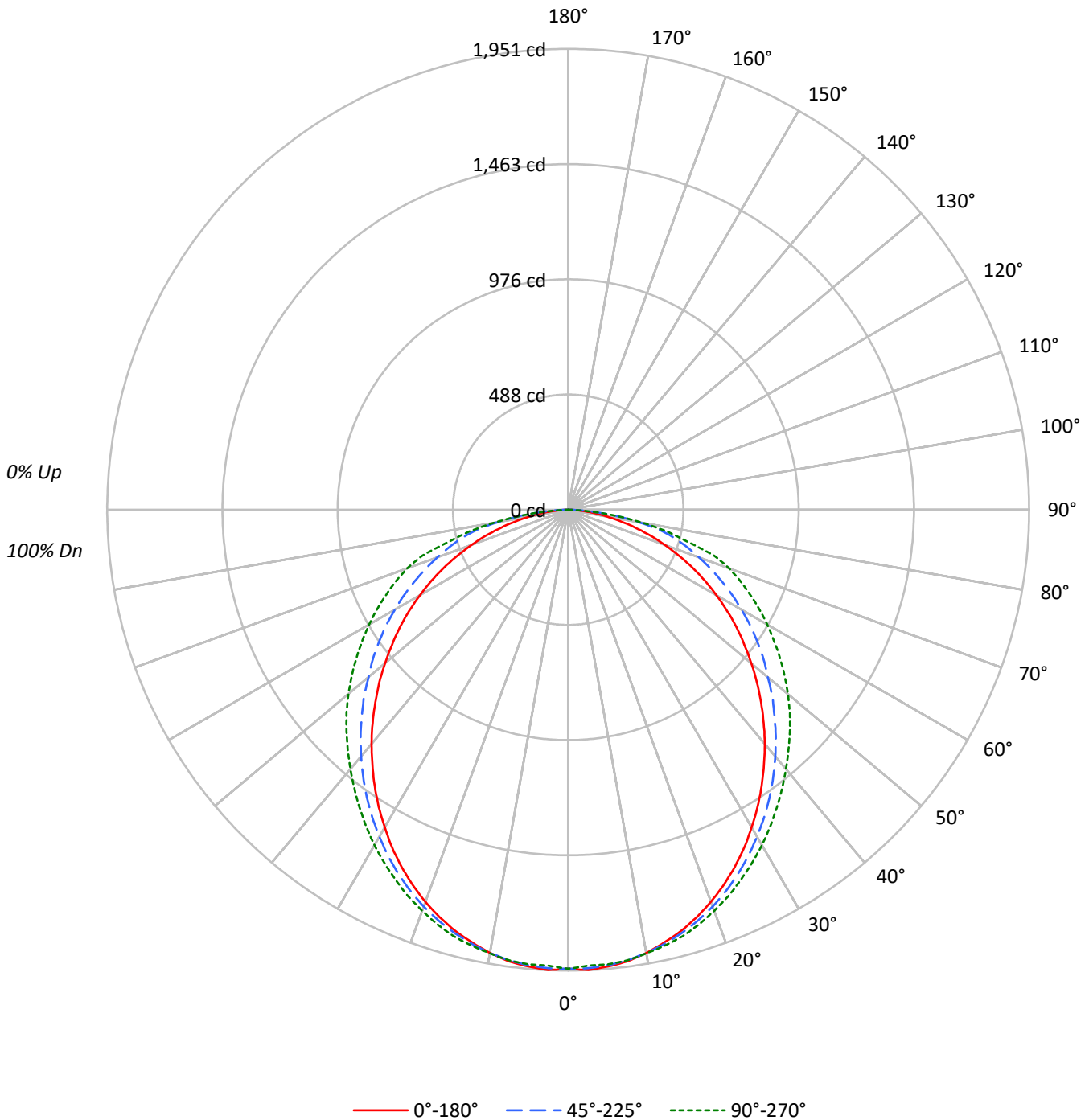
Input Watts (W): 45.418968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2615	2615	2615
5°	2622	2614	2609
10°	2603	2603	2606
15°	2572	2585	2604
20°	2530	2560	2587
25°	2477	2525	2567
30°	2412	2483	2548
35°	2345	2441	2529
40°	2274	2394	2517
45°	2197	2349	2525
50°	2119	2310	2540
55°	2041	2295	2566
60°	1949	2281	2617
65°	1847	2282	2704
70°	1708	2319	2849
75°	1528	2425	2711
80°	1278	2321	2483
85°	966	1786	1698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.6	3.3
10°-20°	522.7	9.4
20°-30°	781.3	14.1
30°-40°	926.9	16.7
40°-50°	954.0	17.2
50°-60°	875.2	15.8
60°-70°	707.6	12.8
70°-80°	459.3	8.3
80°-90°	126.6	2.3
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°	1487.6	26.9
0°-40°	2414.6	43.6
0°-60°	4243.8	76.6
0°-90°	5537.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5537.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1943	1943	1943	1943	1943	
5°	1941	1928	1936	1934	1932	184
15°	1847	1839	1856	1864	1869	520
25°	1668	1670	1701	1716	1729	768
35°	1428	1439	1486	1519	1540	893
45°	1155	1174	1234	1293	1327	891
55°	870	897	978	1058	1094	777
65°	580	614	717	812	849	573
75°	294	349	466	521	521	312
85°	63	106	116	112	110	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1943.3	1943.3	1943.3	1943.3	1943.3
2.5°	1950.9	1935.7	1943.3	1941.4	1932.0
5°	1941.4	1928.2	1935.7	1933.9	1932.0
7.5°	1928.2	1914.9	1924.4	1922.5	1924.4
10°	1905.4	1894.0	1905.4	1907.3	1907.3
12.5°	1877.0	1867.5	1882.7	1886.5	1890.2
15°	1846.6	1839.1	1856.1	1863.7	1869.4
17.5°	1808.7	1803.0	1823.9	1833.4	1841.0
20°	1767.0	1765.1	1787.9	1797.3	1806.8
22.5°	1719.6	1719.6	1746.2	1757.5	1770.8
25°	1668.4	1670.3	1700.7	1715.8	1729.1
27.5°	1613.4	1615.3	1651.4	1670.3	1685.5
30°	1552.8	1560.4	1598.3	1622.9	1640.0
32.5°	1492.1	1501.6	1543.3	1571.7	1590.7
35°	1427.6	1439.0	1486.4	1518.6	1539.5
37.5°	1361.3	1374.6	1425.7	1461.8	1486.4
40°	1294.9	1310.1	1363.2	1404.9	1433.3
42.5°	1224.8	1241.8	1300.6	1349.9	1380.2
45°	1154.6	1173.6	1234.3	1293.0	1327.2
47.5°	1084.5	1107.2	1171.7	1236.1	1272.2
50°	1012.4	1035.2	1103.4	1177.4	1213.4
52.5°	940.4	966.9	1042.8	1118.6	1154.6
55°	870.2	896.8	978.3	1057.9	1094.0
57.5°	798.2	824.7	913.8	997.3	1033.3
60°	724.2	754.6	847.5	932.8	972.6
62.5°	652.2	684.4	783.0	874.0	911.9
65°	580.2	614.3	716.7	811.5	849.4
67.5°	506.2	546.0	652.2	748.9	788.7
70°	434.2	477.8	589.6	686.3	724.2
72.5°	364.0	411.4	527.1	625.7	648.4
75°	293.9	348.9	466.4	521.4	521.4
77.5°	227.5	288.2	398.1	419.0	430.4
80°	164.9	231.3	299.6	324.2	320.4
82.5°	110.0	176.3	214.2	214.2	208.6
85°	62.6	106.2	115.7	111.9	110.0
87.5°	26.5	39.8	36.0	28.4	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)