

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: P230019

Luminaire Tested: **24CZ-LD5-55SE-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230019
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-LD5-55SE-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5319.0 lumens
Efficiency: N/A
Efficacy: 97.3 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

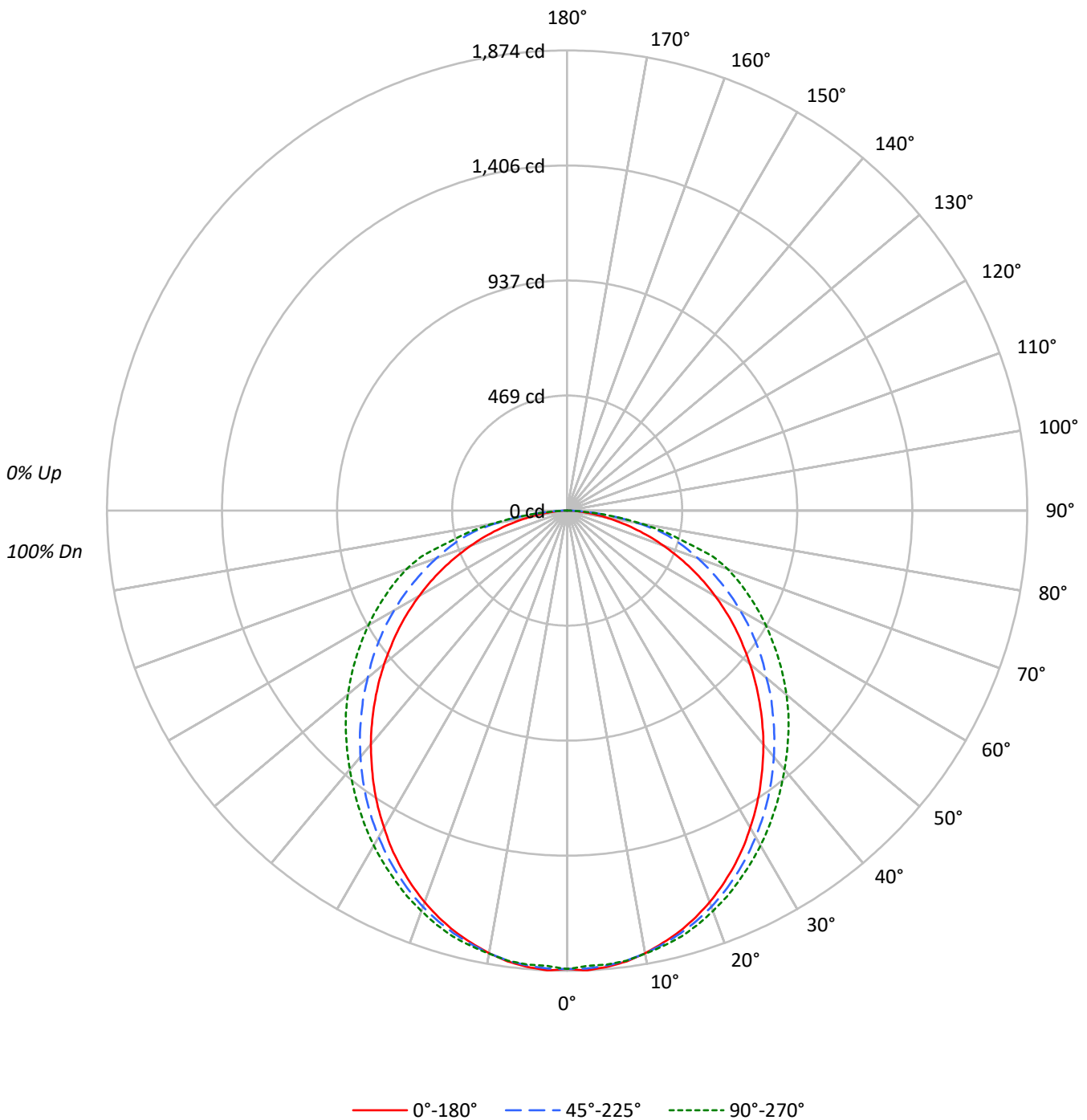
Input Watts (W): 54.69
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2512	2512	2512
5°	2519	2511	2506
10°	2501	2501	2503
15°	2471	2483	2501
20°	2430	2459	2485
25°	2379	2425	2466
30°	2317	2385	2447
35°	2252	2345	2429
40°	2185	2300	2418
45°	2110	2256	2426
50°	2036	2219	2440
55°	1961	2204	2465
60°	1872	2191	2514
65°	1774	2192	2598
70°	1640	2228	2737
75°	1468	2329	2603
80°	1227	2229	2385
85°	928	1715	1630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	3.3
10°-20°	502.0	9.4
20°-30°	750.5	14.1
30°-40°	890.4	16.7
40°-50°	916.4	17.2
50°-60°	840.7	15.8
60°-70°	679.8	12.8
70°-80°	441.1	8.3
80°-90°	121.6	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°	1429.0	26.9
0°-40°	2319.3	43.6
0°-60°	4076.5	76.6
0°-90°	5319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1867	1867	1867	1867	1867	
5°	1865	1852	1859	1858	1856	177
15°	1774	1766	1783	1790	1796	500
25°	1603	1604	1634	1648	1661	738
35°	1371	1382	1428	1459	1479	858
45°	1109	1127	1186	1242	1275	856
55°	836	861	940	1016	1051	747
65°	557	590	688	780	816	551
75°	282	335	448	501	501	300
85°	60	102	111	107	106	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1866.7	1866.7	1866.7	1866.7	1866.7
2.5°	1874.0	1859.4	1866.7	1864.9	1855.8
5°	1864.9	1852.1	1859.4	1857.6	1855.8
7.5°	1852.1	1839.4	1848.5	1846.7	1848.5
10°	1830.3	1819.3	1830.3	1832.1	1832.1
12.5°	1803.0	1793.8	1808.4	1812.1	1815.7
15°	1773.8	1766.5	1782.9	1790.2	1795.7
17.5°	1737.4	1731.9	1752.0	1761.1	1768.3
20°	1697.3	1695.5	1717.4	1726.5	1735.6
22.5°	1651.8	1651.8	1677.3	1688.2	1701.0
25°	1602.6	1604.4	1633.6	1648.2	1660.9
27.5°	1549.8	1551.6	1586.2	1604.4	1619.0
30°	1491.5	1498.8	1535.2	1558.9	1575.3
32.5°	1433.3	1442.4	1482.4	1509.7	1528.0
35°	1371.3	1382.3	1427.8	1458.8	1478.8
37.5°	1307.6	1320.3	1369.5	1404.1	1427.8
40°	1243.9	1258.4	1309.4	1349.5	1376.8
42.5°	1176.5	1192.9	1249.3	1296.7	1325.8
45°	1109.1	1127.3	1185.6	1242.0	1274.8
47.5°	1041.7	1063.6	1125.5	1187.4	1222.0
50°	972.5	994.4	1059.9	1130.9	1165.5
52.5°	903.3	928.8	1001.6	1074.5	1109.1
55°	835.9	861.4	939.7	1016.2	1050.8
57.5°	766.7	792.2	877.8	957.9	992.5
60°	695.7	724.8	814.1	896.0	934.3
62.5°	626.5	657.4	752.1	839.6	876.0
65°	557.3	590.1	688.4	779.5	815.9
67.5°	486.3	524.5	626.5	719.4	757.6
70°	417.0	458.9	566.4	659.3	695.7
72.5°	349.7	395.2	506.3	601.0	622.8
75°	282.3	335.1	448.0	500.8	500.8
77.5°	218.5	276.8	382.4	402.5	413.4
80°	158.4	222.2	287.7	311.4	307.8
82.5°	105.6	169.4	205.8	205.8	200.3
85°	60.1	102.0	111.1	107.4	105.6
87.5°	25.5	38.2	34.6	27.3	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)