

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: P230025

Luminaire Tested: **24CZ-LD5-65SE-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230025
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-LD5-65SE-UNV-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5628.0 lumens
Efficiency: N/A
Efficacy: 93.8 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

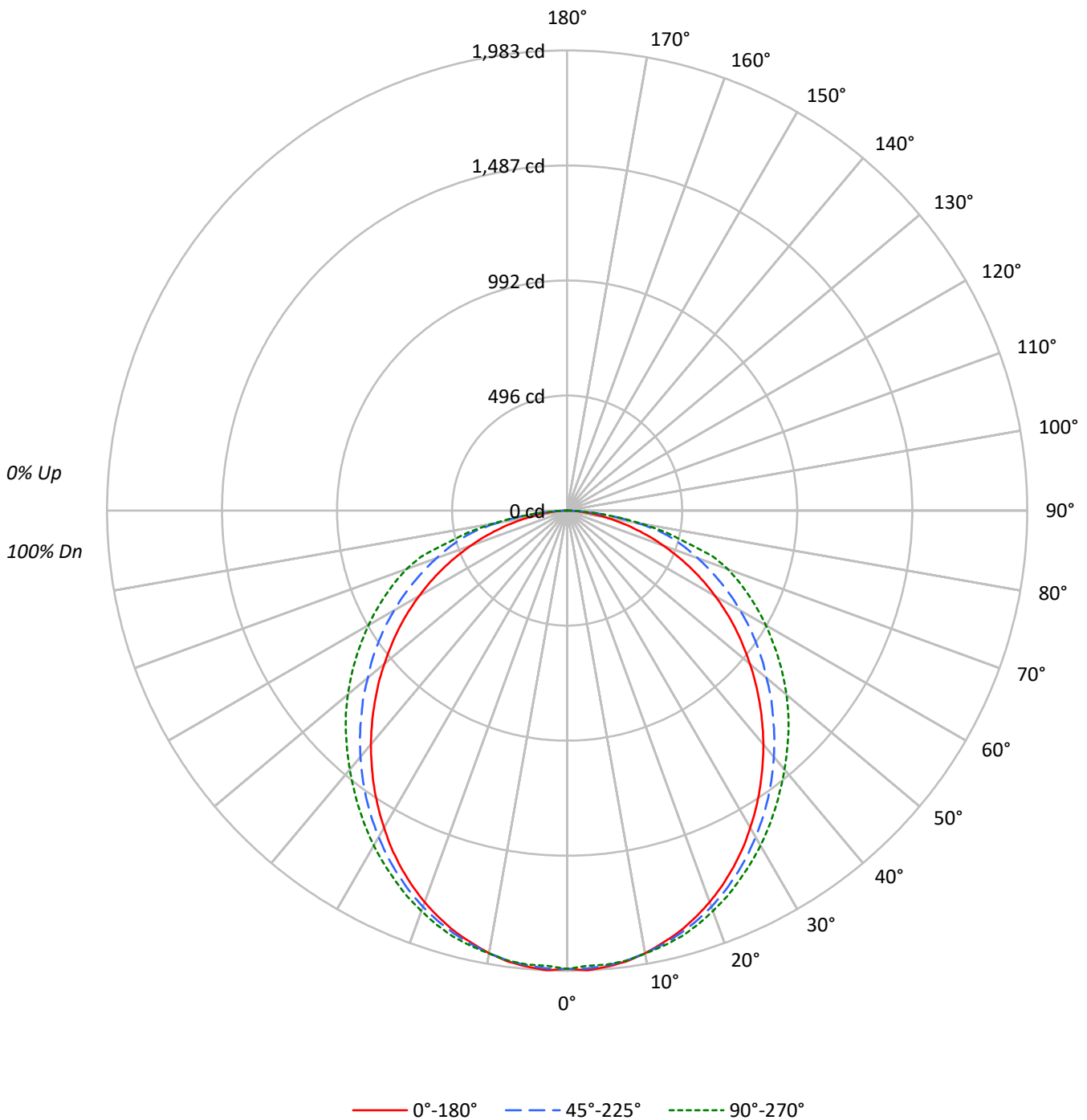
Input Watts (W): 60
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2657	2657	2657
5°	2665	2657	2652
10°	2646	2646	2648
15°	2614	2628	2647
20°	2571	2602	2629
25°	2517	2566	2609
30°	2452	2524	2590
35°	2383	2481	2570
40°	2312	2434	2559
45°	2233	2387	2567
50°	2154	2348	2582
55°	2075	2332	2608
60°	1981	2318	2660
65°	1877	2319	2748
70°	1736	2358	2896
75°	1553	2464	2755
80°	1299	2359	2524
85°	982	1814	1726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	3.3
10°-20°	531.2	9.4
20°-30°	794.1	14.1
30°-40°	942.1	16.7
40°-50°	969.7	17.2
50°-60°	889.5	15.8
60°-70°	719.2	12.8
70°-80°	466.8	8.3
80°-90°	128.7	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°	1512.0	26.9
0°-40°	2454.1	43.6
0°-60°	4313.3	76.6
0°-90°	5628.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5628.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1975	1975	1975	1975	1975	
5°	1973	1960	1967	1966	1964	187
15°	1877	1869	1886	1894	1900	529
25°	1696	1698	1728	1744	1757	781
35°	1451	1463	1511	1544	1565	907
45°	1174	1193	1254	1314	1349	906
55°	884	912	994	1075	1112	790
65°	590	624	728	825	863	583
75°	299	355	474	530	530	317
85°	64	108	118	114	112	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1975.1	1975.1	1975.1	1975.1	1975.1
2.5°	1982.8	1967.4	1975.1	1973.2	1963.6
5°	1973.2	1959.7	1967.4	1965.5	1963.6
7.5°	1959.7	1946.2	1955.9	1953.9	1955.9
10°	1936.6	1925.0	1936.6	1938.5	1938.5
12.5°	1907.7	1898.1	1913.5	1917.3	1921.2
15°	1876.9	1869.2	1886.5	1894.2	1900.0
17.5°	1838.3	1832.5	1853.7	1863.4	1871.1
20°	1795.9	1794.0	1817.1	1826.8	1836.4
22.5°	1747.8	1747.8	1774.7	1786.3	1799.8
25°	1695.7	1697.7	1728.5	1743.9	1757.4
27.5°	1639.8	1641.8	1678.4	1697.7	1713.1
30°	1578.2	1585.9	1624.4	1649.5	1666.8
32.5°	1516.5	1526.2	1568.5	1597.5	1616.7
35°	1451.0	1462.6	1510.7	1543.5	1564.7
37.5°	1383.6	1397.0	1449.1	1485.7	1510.7
40°	1316.1	1331.5	1385.5	1427.9	1456.8
42.5°	1244.8	1262.2	1321.9	1372.0	1402.8
45°	1173.5	1192.8	1254.5	1314.2	1348.9
47.5°	1102.2	1125.3	1190.9	1256.4	1293.0
50°	1029.0	1052.1	1121.5	1196.6	1233.3
52.5°	955.8	982.8	1059.8	1136.9	1173.5
55°	884.5	911.5	994.3	1075.2	1111.9
57.5°	811.3	838.2	928.8	1013.6	1050.2
60°	736.1	766.9	861.4	948.1	988.5
62.5°	662.9	695.6	795.8	888.3	926.9
65°	589.7	624.3	728.4	824.7	863.3
67.5°	514.5	555.0	662.9	761.1	801.6
70°	441.3	485.6	599.3	697.6	736.1
72.5°	370.0	418.2	535.7	635.9	659.0
75°	298.7	354.6	474.0	529.9	529.9
77.5°	231.2	292.9	404.7	425.9	437.4
80°	167.6	235.1	304.5	329.5	325.7
82.5°	111.8	179.2	217.7	217.7	212.0
85°	63.6	107.9	117.5	113.7	111.8
87.5°	27.0	40.5	36.6	28.9	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)