

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: P388871

Luminaire Tested: **24CZ2-55VHE-UNV-L930-CD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P388871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-UNV-L930-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

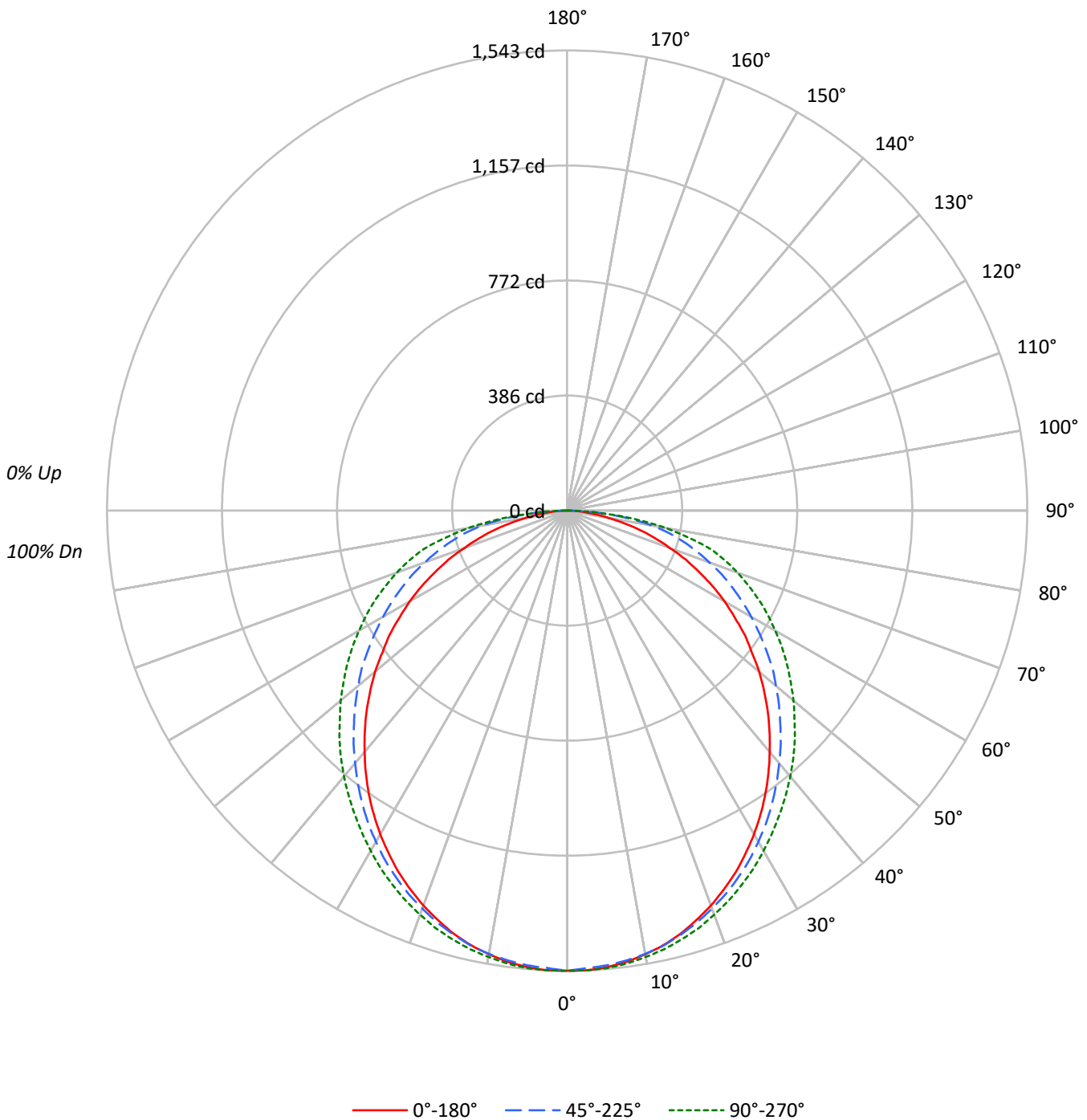
Lumens per Lamp: N/A
Luminaire Lumens: 4595.7 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.1
Input Voltage (V): NR
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	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2076	2076	2076
5°	2076	2067	2080
10°	2064	2062	2077
15°	2047	2051	2072
20°	2018	2034	2064
25°	1986	2015	2056
30°	1947	1992	2047
35°	1905	1968	2041
40°	1856	1942	2045
45°	1809	1923	2055
50°	1759	1913	2074
55°	1705	1910	2112
60°	1639	1919	2167
65°	1553	1948	2261
70°	1442	1997	2389
75°	1316	2097	2591
80°	1082	2258	2591
85°	829	2084	2226



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.9	3.2
10°-20°	416.6	9.1
20°-30°	626.9	13.6
30°-40°	751.3	16.3
40°-50°	783.0	17.0
50°-60°	728.5	15.9
60°-70°	600.0	13.1
70°-80°	408.6	8.9
80°-90°	134.9	2.9
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°	1189.5	25.9
0°-40°	1940.8	42.2
0°-60°	3452.2	75.1
0°-90°	4595.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4595.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1537	1537	1531	1538	1540	146
15°	1469	1471	1472	1486	1488	414
25°	1338	1344	1357	1380	1385	616
35°	1160	1173	1198	1230	1242	725
45°	951	971	1011	1061	1080	733
55°	727	752	814	879	900	648
65°	488	529	612	684	710	484
75°	253	310	403	476	498	267
85°	54	104	135	144	144	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1543.0	1543.0	1543.0	1543.0	1543.0
2.5°	1543.0	1543.0	1535.3	1543.0	1543.0
5°	1536.9	1536.9	1530.7	1538.4	1539.9
7.5°	1526.1	1527.7	1521.5	1530.7	1532.3
10°	1510.8	1512.3	1509.2	1518.4	1520.0
12.5°	1492.4	1493.9	1493.9	1504.6	1506.2
15°	1469.4	1470.9	1472.4	1486.2	1487.8
17.5°	1440.2	1444.8	1447.9	1464.8	1467.8
20°	1409.6	1414.2	1420.3	1438.7	1441.8
22.5°	1374.3	1380.4	1391.1	1411.1	1415.7
25°	1337.5	1343.6	1357.4	1380.4	1385.0
27.5°	1296.1	1305.3	1322.1	1346.7	1352.8
30°	1253.1	1262.3	1282.2	1308.3	1317.5
32.5°	1207.1	1219.4	1242.4	1271.5	1280.7
35°	1159.5	1173.3	1197.9	1230.1	1242.4
37.5°	1108.9	1124.3	1153.4	1188.7	1204.0
40°	1056.8	1075.2	1105.9	1147.3	1164.1
42.5°	1004.6	1021.5	1059.8	1104.3	1122.7
45°	950.9	970.9	1010.8	1061.4	1079.8
47.5°	895.7	915.7	963.2	1016.9	1033.8
50°	840.5	860.5	914.1	970.9	990.8
52.5°	780.7	806.8	868.1	924.9	944.8
55°	727.0	751.6	814.4	878.9	900.3
57.5°	665.7	694.8	763.8	831.3	854.3
60°	608.9	639.6	713.2	782.2	805.2
62.5°	550.6	584.4	662.6	733.2	759.2
65°	487.7	529.2	612.0	684.1	710.1
67.5°	431.0	473.9	561.4	635.0	658.0
70°	366.6	418.7	507.7	581.3	607.4
72.5°	311.4	363.5	457.1	529.2	555.2
75°	253.1	309.8	403.4	475.5	498.5
77.5°	194.8	257.7	351.2	406.5	414.1
80°	139.6	205.5	291.4	323.6	334.4
82.5°	98.2	158.0	214.7	236.2	242.3
85°	53.7	104.3	135.0	144.2	144.2
87.5°	23.0	44.5	53.7	55.2	56.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)