

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: P260816

Luminaire Tested: **24CZ-LD5-40SE-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260816
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-LD5-40SE-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4209.0 lumens
Efficiency: N/A
Efficacy: 134.7 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

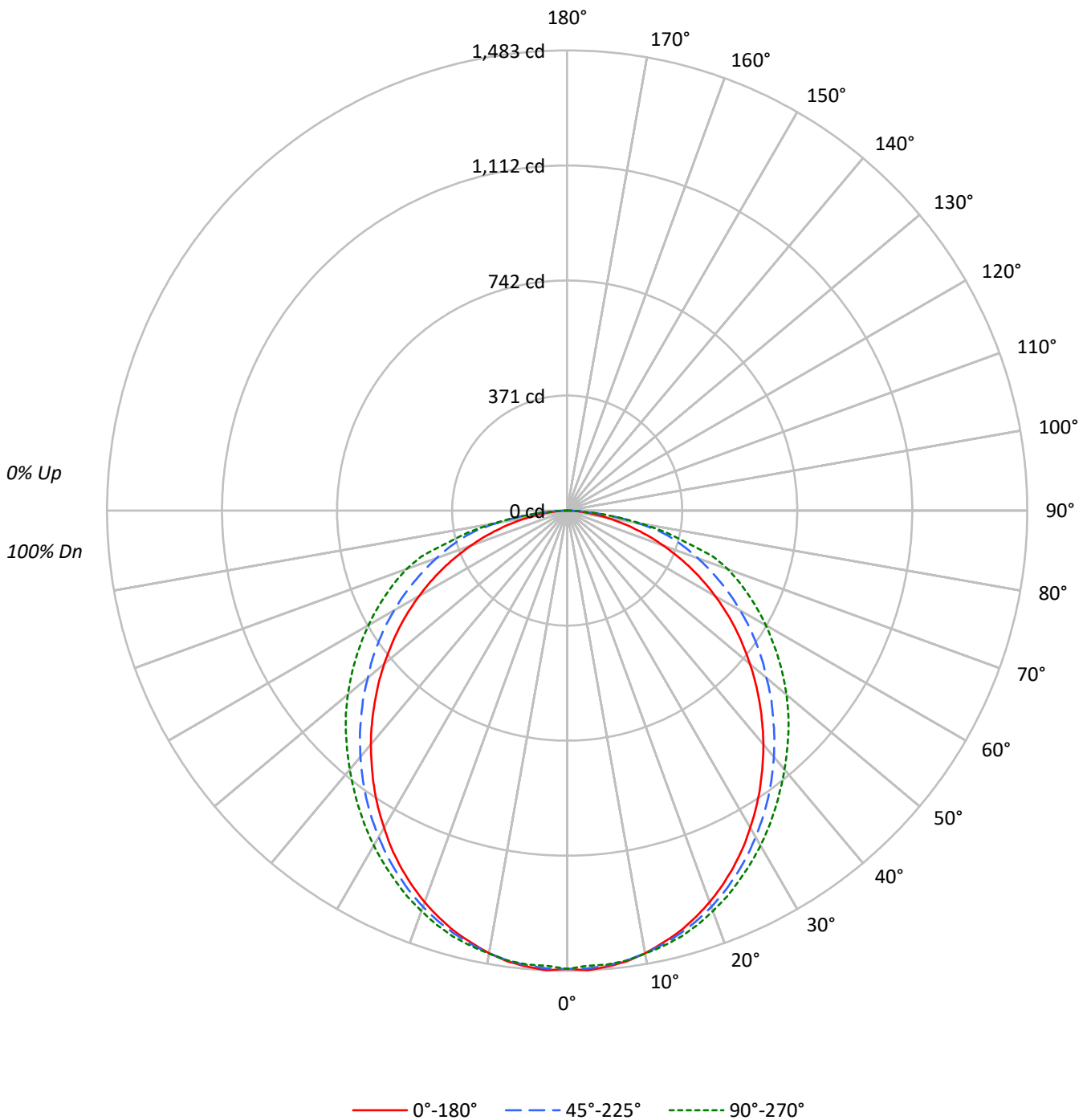
Input Watts (W): 31.248
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1987	1987	1987
5°	1993	1987	1983
10°	1979	1979	1981
15°	1955	1965	1979
20°	1923	1946	1966
25°	1883	1919	1951
30°	1834	1888	1937
35°	1782	1856	1922
40°	1729	1820	1914
45°	1670	1785	1920
50°	1611	1756	1931
55°	1552	1744	1951
60°	1481	1734	1989
65°	1404	1734	2055
70°	1298	1763	2166
75°	1161	1843	2060
80°	972	1764	1887
85°	735	1357	1291



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	3.3
10°-20°	397.3	9.4
20°-30°	593.9	14.1
30°-40°	704.6	16.7
40°-50°	725.2	17.2
50°-60°	665.2	15.8
60°-70°	537.9	12.8
70°-80°	349.1	8.3
80°-90°	96.2	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°	1130.8	26.9
0°-40°	1835.3	43.6
0°-60°	3225.8	76.6
0°-90°	4209.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4209.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1477	1477	1477	1477	1477	
5°	1476	1466	1471	1470	1468	140
15°	1404	1398	1411	1417	1421	395
25°	1268	1270	1293	1304	1314	584
35°	1085	1094	1130	1154	1170	679
45°	878	892	938	983	1009	677
55°	662	682	744	804	832	591
65°	441	467	545	617	646	436
75°	223	265	354	396	396	237
85°	48	81	88	85	84	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1477.1	1477.1	1477.1	1477.1	1477.1
2.5°	1482.9	1471.4	1477.1	1475.7	1468.5
5°	1475.7	1465.6	1471.4	1469.9	1468.5
7.5°	1465.6	1455.5	1462.7	1461.3	1462.7
10°	1448.3	1439.7	1448.3	1449.8	1449.8
12.5°	1426.7	1419.5	1431.0	1433.9	1436.8
15°	1403.6	1397.9	1410.8	1416.6	1420.9
17.5°	1374.8	1370.5	1386.4	1393.6	1399.3
20°	1343.1	1341.7	1359.0	1366.2	1373.4
22.5°	1307.1	1307.1	1327.3	1335.9	1346.0
25°	1268.2	1269.6	1292.7	1304.2	1314.3
27.5°	1226.4	1227.8	1255.2	1269.6	1281.1
30°	1180.3	1186.0	1214.9	1233.6	1246.6
32.5°	1134.2	1141.4	1173.1	1194.7	1209.1
35°	1085.2	1093.8	1129.8	1154.3	1170.2
37.5°	1034.7	1044.8	1083.7	1111.1	1129.8
40°	984.3	995.8	1036.2	1067.9	1089.5
42.5°	931.0	943.9	988.6	1026.1	1049.1
45°	877.6	892.0	938.2	982.8	1008.8
47.5°	824.3	841.6	890.6	939.6	967.0
50°	769.6	786.8	838.7	894.9	922.3
52.5°	714.8	735.0	792.6	850.3	877.6
55°	661.5	681.6	743.6	804.1	831.5
57.5°	606.7	626.9	694.6	758.0	785.4
60°	550.5	573.6	644.2	709.0	739.3
62.5°	495.7	520.2	595.2	664.4	693.2
65°	441.0	466.9	544.7	616.8	645.6
67.5°	384.8	415.0	495.7	569.2	599.5
70°	330.0	363.2	448.2	521.7	550.5
72.5°	276.7	312.7	400.6	475.6	492.9
75°	223.4	265.2	354.5	396.3	396.3
77.5°	172.9	219.0	302.6	318.5	327.1
80°	125.4	175.8	227.7	246.4	243.5
82.5°	83.6	134.0	162.8	162.8	158.5
85°	47.6	80.7	87.9	85.0	83.6
87.5°	20.2	30.3	27.4	21.6	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)