

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: P230498

Luminaire Tested: **24CZ-LD5-75-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-75-RDP-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4352.0 lumens
Efficiency: N/A
Efficacy: 63.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

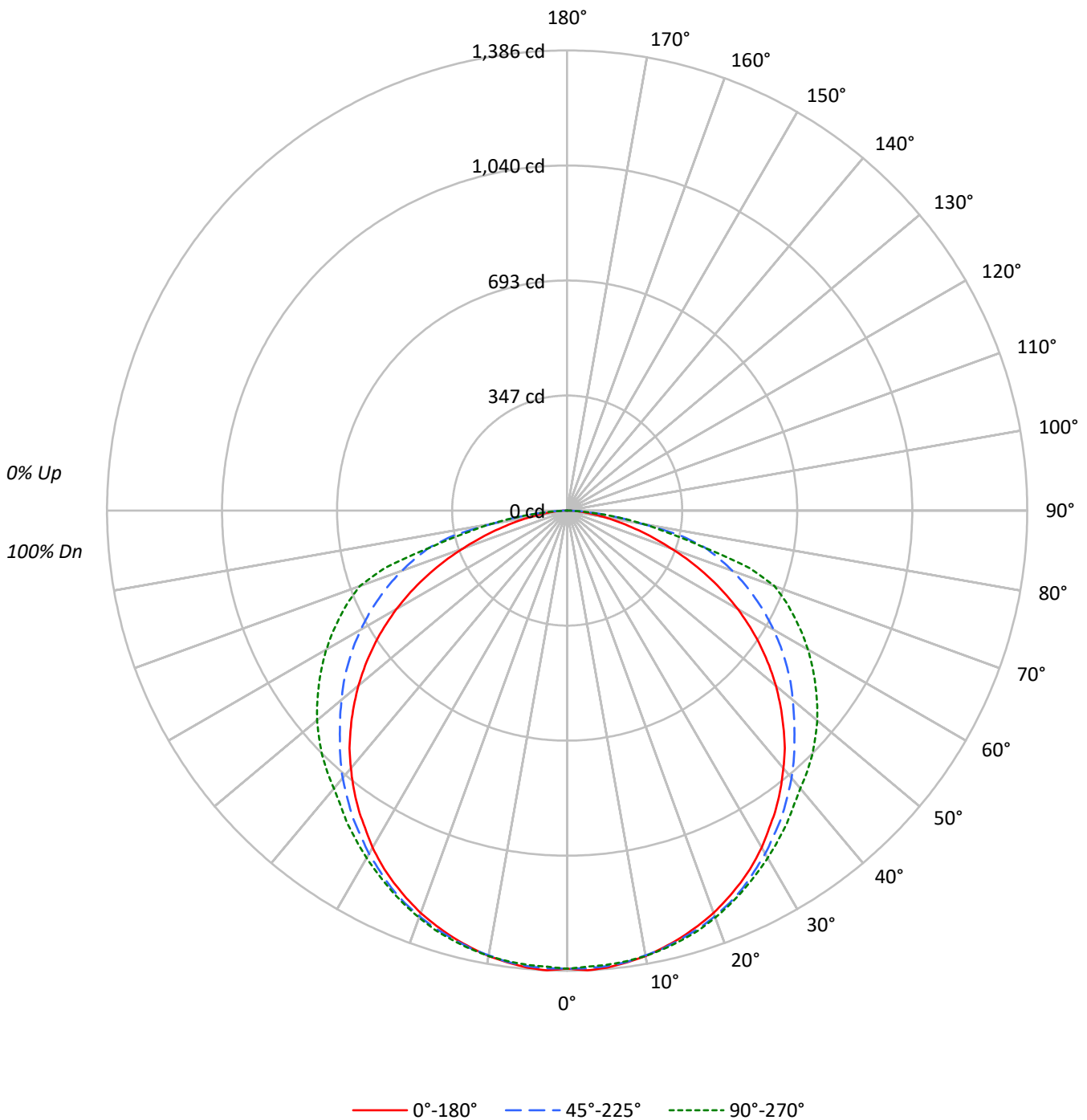
Input Watts (W): 69.06
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	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	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1856	1856	1856
5°	1866	1860	1855
10°	1862	1859	1862
15°	1853	1859	1865
20°	1847	1862	1868
25°	1835	1860	1870
30°	1821	1854	1877
35°	1802	1851	1893
40°	1780	1848	1919
45°	1753	1842	1985
50°	1717	1856	2058
55°	1668	1890	2141
60°	1597	1931	2254
65°	1487	1991	2401
70°	1315	2081	2613
75°	1103	2228	2194
80°	879	1760	1826
85°	695	1190	1091



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	3.0
10°-20°	376.6	8.7
20°-30°	575.2	13.2
30°-40°	703.2	16.2
40°-50°	752.7	17.3
50°-60°	722.0	16.6
60°-70°	609.6	14.0
70°-80°	389.6	9.0
80°-90°	92.1	2.1
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°	1082.7	24.9
0°-40°	1785.9	41.0
0°-60°	3260.6	74.9
0°-90°	4352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4352.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1380	1380	1380	1380	1380	
5°	1382	1373	1378	1375	1373	131
15°	1330	1326	1335	1339	1339	376
25°	1236	1234	1253	1258	1260	570
35°	1097	1105	1127	1142	1152	686
45°	921	936	968	1013	1043	711
55°	711	735	806	878	913	635
65°	467	512	626	713	754	461
75°	212	302	428	437	422	228
85°	45	75	77	75	71	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1379.6	1379.6	1379.6	1379.6	1379.6
2.5°	1386.1	1377.5	1379.6	1379.6	1375.3
5°	1381.8	1373.2	1377.5	1375.3	1373.2
7.5°	1373.2	1366.8	1371.1	1371.1	1368.9
10°	1362.5	1356.1	1360.3	1362.5	1362.5
12.5°	1347.5	1343.2	1349.6	1349.6	1351.8
15°	1330.4	1326.1	1334.6	1338.9	1338.9
17.5°	1311.1	1308.9	1319.6	1321.8	1323.9
20°	1289.7	1287.5	1300.4	1300.4	1304.6
22.5°	1263.9	1261.8	1278.9	1278.9	1283.2
25°	1236.1	1234.0	1253.2	1257.5	1259.7
27.5°	1206.1	1204.0	1223.2	1229.7	1234.0
30°	1171.8	1171.8	1193.3	1201.8	1208.2
32.5°	1133.3	1139.7	1159.0	1171.8	1180.4
35°	1096.8	1105.4	1126.8	1141.8	1152.5
37.5°	1056.1	1064.7	1088.3	1107.6	1120.4
40°	1013.3	1024.0	1051.9	1073.3	1092.6
42.5°	970.5	981.2	1011.2	1043.3	1069.0
45°	921.2	936.2	968.3	1013.3	1043.3
47.5°	871.9	886.9	927.6	983.3	1013.3
50°	820.5	837.6	886.9	951.2	983.3
52.5°	766.9	786.2	848.3	916.9	949.0
55°	711.2	734.8	805.5	878.3	912.6
57.5°	653.4	679.1	762.7	839.8	876.2
60°	593.4	625.5	717.7	799.1	837.6
62.5°	531.3	569.8	672.7	756.2	796.9
65°	467.0	512.0	625.5	713.4	754.1
67.5°	400.6	460.6	578.4	670.5	711.2
70°	334.2	404.9	529.1	623.4	664.1
72.5°	272.1	353.5	479.9	567.7	576.3
75°	212.1	302.1	428.5	437.0	422.0
77.5°	158.5	250.6	353.5	314.9	312.8
80°	113.5	201.4	227.1	233.5	235.7
82.5°	75.0	152.1	147.8	152.1	150.0
85°	45.0	75.0	77.1	75.0	70.7
87.5°	21.4	27.8	21.4	19.3	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)