

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: P263179

Luminaire Tested: **24CZ-LD5-60-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263179
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-60-SQP-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3665.8 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

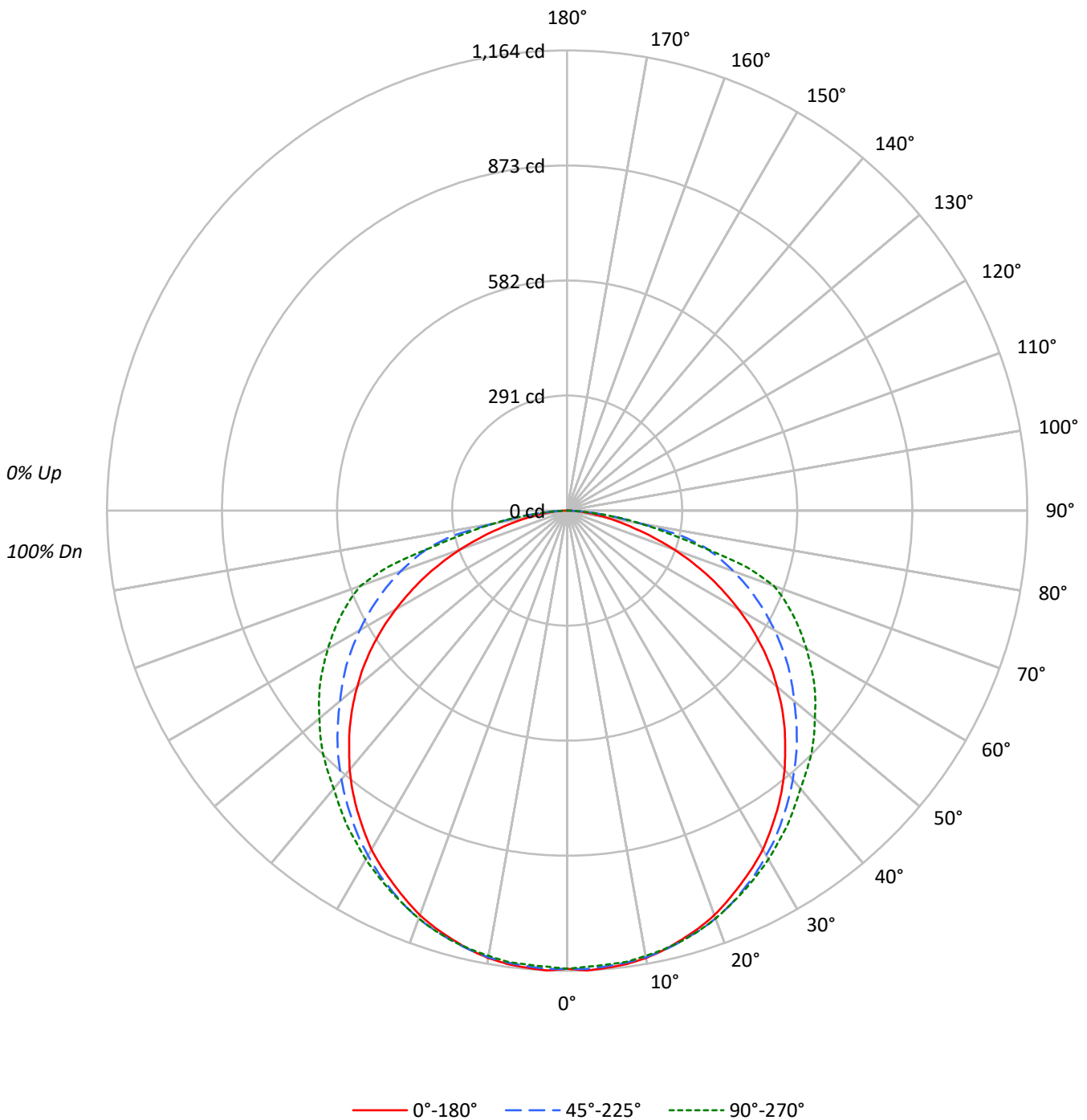
Input Watts (W): 45.418968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	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°	1559	1559	1559
5°	1568	1563	1557
10°	1570	1568	1563
15°	1564	1569	1569
20°	1559	1572	1572
25°	1546	1569	1574
30°	1539	1565	1583
35°	1521	1561	1596
40°	1503	1560	1613
45°	1481	1564	1661
50°	1451	1569	1712
55°	1412	1599	1790
60°	1350	1630	1880
65°	1266	1682	2013
70°	1132	1758	2190
75°	935	1880	1811
80°	763	1453	1467
85°	614	965	906



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.1	3.0
10°-20°	317.6	8.7
20°-30°	485.4	13.2
30°-40°	593.6	16.2
40°-50°	635.2	17.3
50°-60°	608.2	16.6
60°-70°	514.5	14.0
70°-80°	326.2	8.9
80°-90°	75.0	2.0
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°	913.0	24.9
0°-40°	1506.6	41.1
0°-60°	2750.1	75.0
0°-90°	3665.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3665.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1161	1155	1157	1155	1153	110
15°	1123	1121	1127	1127	1127	317
25°	1041	1041	1057	1060	1060	480
35°	926	932	950	964	971	579
45°	778	792	822	856	873	600
55°	602	621	682	738	763	537
65°	398	436	528	600	632	392
75°	180	254	362	360	348	196
85°	40	61	62	57	59	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.8	1158.8	1158.8	1158.8	1158.8
2.5°	1164.5	1158.8	1160.7	1158.8	1155.0
5°	1160.7	1155.0	1156.9	1155.0	1153.1
7.5°	1156.9	1151.2	1153.1	1151.2	1151.2
10°	1149.3	1143.7	1147.4	1145.6	1143.7
12.5°	1138.0	1134.2	1138.0	1136.1	1136.1
15°	1122.8	1120.9	1126.6	1126.6	1126.6
17.5°	1107.7	1105.8	1113.4	1113.4	1113.4
20°	1088.8	1086.9	1098.2	1098.2	1098.2
22.5°	1066.0	1064.1	1079.3	1079.3	1079.3
25°	1041.4	1041.4	1056.6	1060.3	1060.3
27.5°	1016.8	1016.8	1033.8	1039.5	1039.5
30°	990.3	990.3	1007.3	1014.9	1018.7
32.5°	958.1	961.9	980.8	990.3	994.1
35°	925.9	931.6	950.5	963.8	971.4
37.5°	891.8	897.5	920.2	935.4	944.8
40°	855.9	863.4	888.0	907.0	918.3
42.5°	816.1	827.5	855.9	880.5	895.6
45°	778.2	791.5	821.8	855.9	872.9
47.5°	736.6	751.7	785.8	829.3	846.4
50°	693.0	708.2	749.8	799.0	818.0
52.5°	649.5	666.5	715.7	768.8	791.5
55°	602.1	621.1	681.7	738.5	763.1
57.5°	552.9	575.6	643.8	704.4	730.9
60°	501.8	530.2	605.9	670.3	698.7
62.5°	448.8	482.8	568.0	636.2	666.5
65°	397.6	435.5	528.3	600.2	632.4
67.5°	342.7	390.1	488.5	566.2	596.4
70°	287.8	342.7	446.9	526.4	556.7
72.5°	232.9	299.2	405.2	477.2	477.2
75°	179.9	253.7	361.7	359.8	348.4
77.5°	136.3	212.1	297.3	253.7	255.6
80°	98.5	170.4	187.5	187.5	189.3
82.5°	66.3	130.7	121.2	119.3	123.1
85°	39.8	60.6	62.5	56.8	58.7
87.5°	18.9	20.8	17.0	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)