

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: P230410

Luminaire Tested: **24CZ-LD5-55-SQP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230410
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-LD5-55-SQP-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3354.5 lumens
Efficiency: N/A
Efficacy: 73.2 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

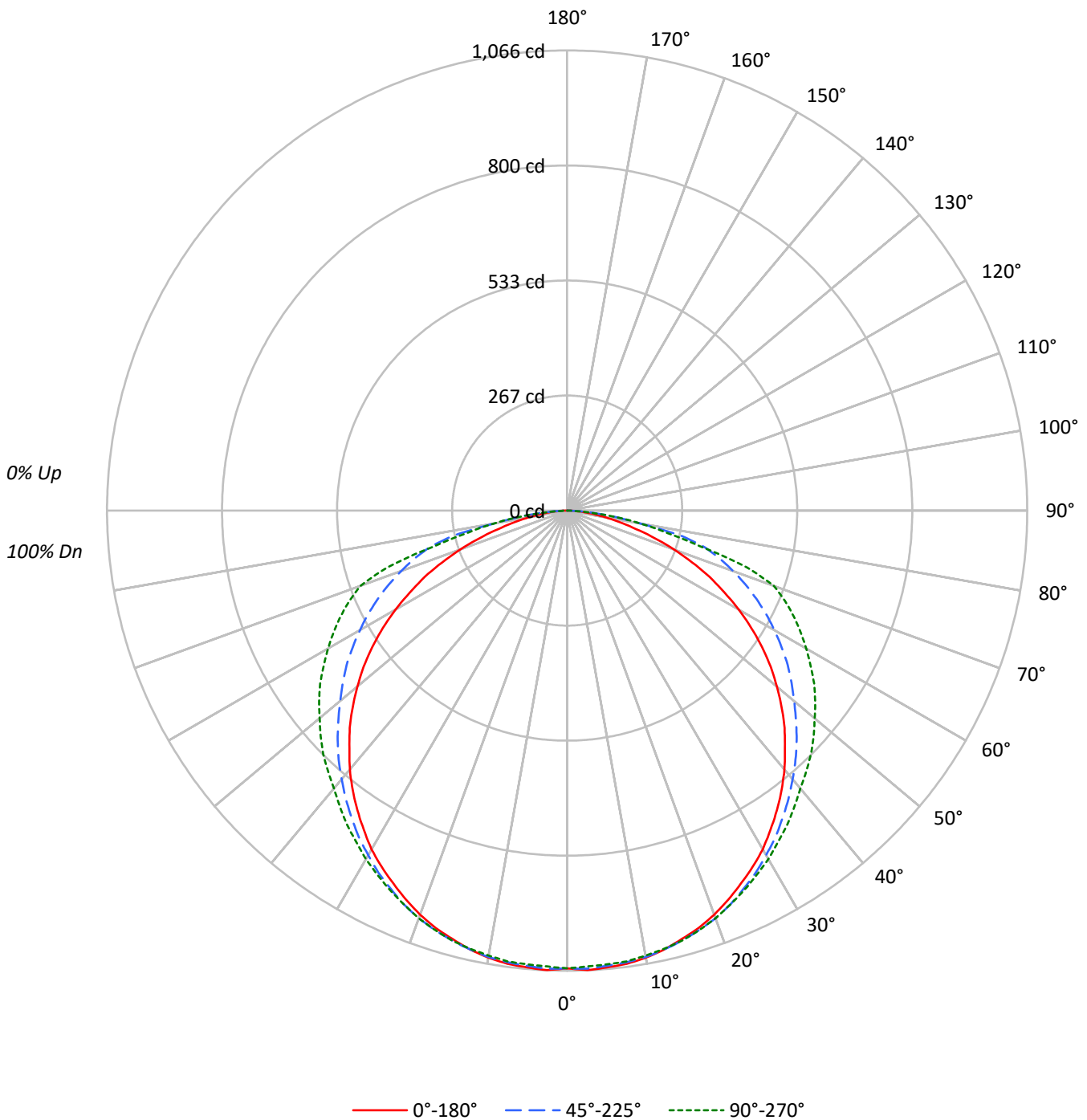
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1427	1427	1427
5°	1435	1430	1425
10°	1437	1435	1430
15°	1431	1436	1436
20°	1427	1439	1439
25°	1415	1435	1440
30°	1408	1432	1448
35°	1392	1429	1460
40°	1376	1427	1476
45°	1355	1431	1520
50°	1328	1436	1567
55°	1293	1463	1638
60°	1236	1492	1721
65°	1159	1539	1842
70°	1036	1609	2004
75°	856	1721	1657
80°	698	1329	1343
85°	562	883	829



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.7	3.0
10°-20°	290.6	8.7
20°-30°	444.2	13.2
30°-40°	543.2	16.2
40°-50°	581.3	17.3
50°-60°	556.6	16.6
60°-70°	470.8	14.0
70°-80°	298.5	8.9
80°-90°	68.7	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°	835.5	24.9
0°-40°	1378.7	41.1
0°-60°	2516.6	75.0
0°-90°	3354.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3354.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1062	1057	1059	1057	1055	101
15°	1028	1026	1031	1031	1031	290
25°	953	953	967	970	970	440
35°	847	852	870	882	889	530
45°	712	724	752	783	799	549
55°	551	568	624	676	698	491
65°	364	398	483	549	579	358
75°	165	232	331	329	319	179
85°	36	55	57	52	54	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.4	1060.4	1060.4	1060.4	1060.4
2.5°	1065.6	1060.4	1062.2	1060.4	1057.0
5°	1062.2	1057.0	1058.7	1057.0	1055.2
7.5°	1058.7	1053.5	1055.2	1053.5	1053.5
10°	1051.8	1046.6	1050.0	1048.3	1046.6
12.5°	1041.4	1037.9	1041.4	1039.6	1039.6
15°	1027.5	1025.8	1031.0	1031.0	1031.0
17.5°	1013.6	1011.9	1018.8	1018.8	1018.8
20°	996.3	994.6	1005.0	1005.0	1005.0
22.5°	975.5	973.8	987.7	987.7	987.7
25°	953.0	953.0	966.9	970.3	970.3
27.5°	930.5	930.5	946.1	951.3	951.3
30°	906.2	906.2	921.8	928.7	932.2
32.5°	876.8	880.2	897.6	906.2	909.7
35°	847.3	852.5	869.8	882.0	888.9
37.5°	816.1	821.3	842.1	856.0	864.6
40°	783.2	790.1	812.6	830.0	840.4
42.5°	746.8	757.2	783.2	805.7	819.6
45°	712.2	724.3	752.0	783.2	798.8
47.5°	674.0	687.9	719.1	758.9	774.5
50°	634.2	648.0	686.2	731.2	748.5
52.5°	594.3	609.9	655.0	703.5	724.3
55°	551.0	568.3	623.8	675.8	698.3
57.5°	506.0	526.7	589.1	644.6	668.8
60°	459.2	485.2	554.5	613.4	639.4
62.5°	410.7	441.8	519.8	582.2	609.9
65°	363.9	398.5	483.4	549.3	578.7
67.5°	313.6	356.9	447.0	518.1	545.8
70°	263.4	313.6	408.9	481.7	509.4
72.5°	213.1	273.8	370.8	436.6	436.6
75°	164.6	232.2	331.0	329.2	318.8
77.5°	124.8	194.1	272.0	232.2	233.9
80°	90.1	155.9	171.5	171.5	173.3
82.5°	60.6	119.6	110.9	109.2	112.6
85°	36.4	55.4	57.2	52.0	53.7
87.5°	17.3	19.1	15.6	10.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)