

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: P230404

Luminaire Tested: **24CZ-LD5-50-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230404
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-LD5-50-SQP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2854.4 lumens
Efficiency: N/A
Efficacy: 70.2 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

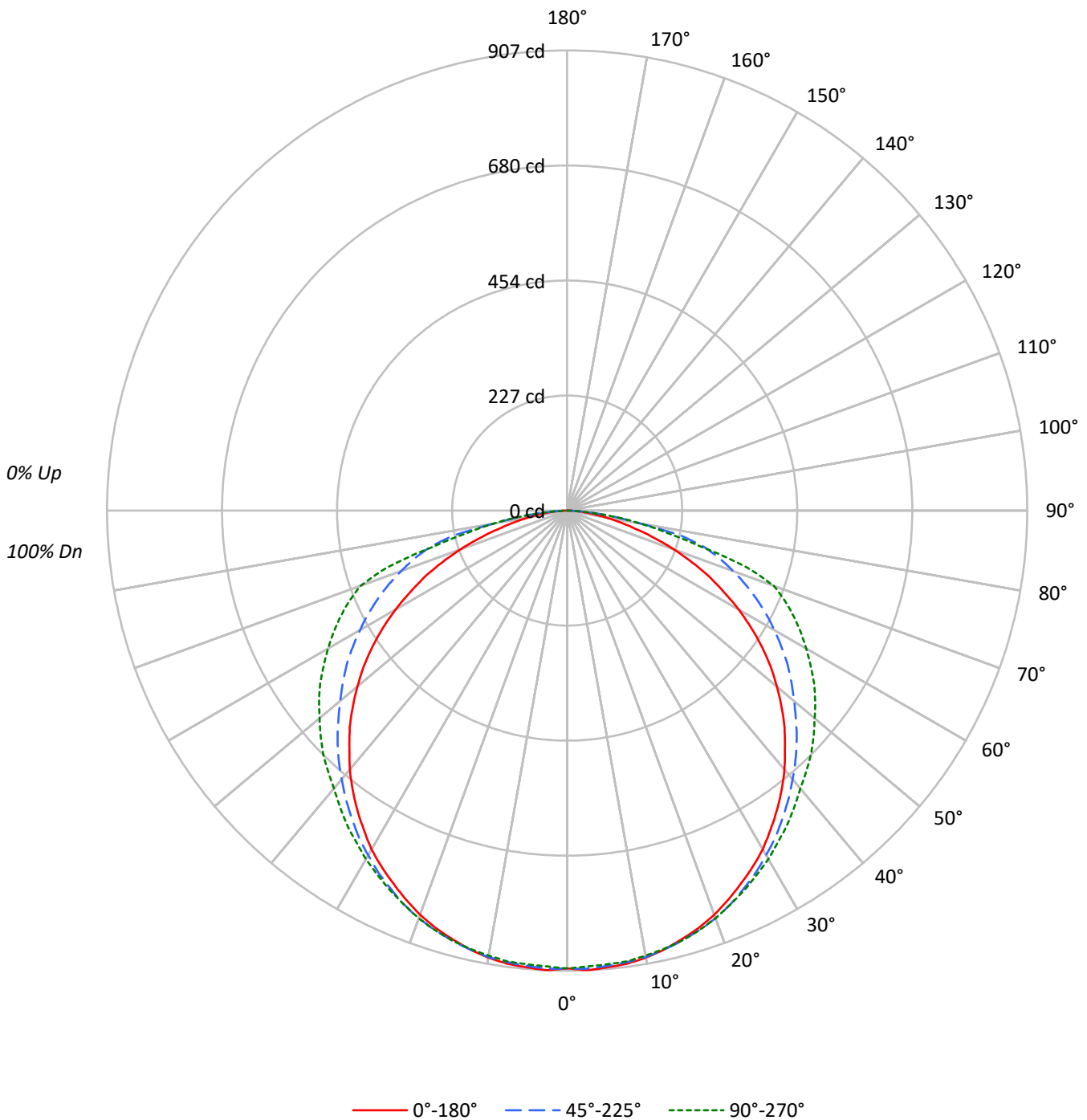
Input Watts (W): 40.68
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1214	1214	1214
5°	1221	1217	1213
10°	1223	1221	1217
15°	1218	1222	1222
20°	1214	1224	1224
25°	1204	1221	1226
30°	1198	1219	1232
35°	1184	1216	1242
40°	1170	1215	1256
45°	1153	1218	1293
50°	1129	1222	1333
55°	1100	1245	1394
60°	1051	1270	1464
65°	986	1310	1568
70°	882	1369	1705
75°	728	1464	1410
80°	594	1131	1142
85°	479	752	706



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	3.0
10°-20°	247.3	8.7
20°-30°	377.9	13.2
30°-40°	462.2	16.2
40°-50°	494.6	17.3
50°-60°	473.6	16.6
60°-70°	400.6	14.0
70°-80°	254.0	8.9
80°-90°	58.4	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°	710.9	24.9
0°-40°	1173.2	41.1
0°-60°	2141.4	75.0
0°-90°	2854.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2854.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	902	902	902	902	902	
5°	904	899	901	899	898	86
15°	874	873	877	877	877	247
25°	811	811	823	826	826	374
35°	721	725	740	750	756	451
45°	606	616	640	666	680	467
55°	469	484	531	575	594	418
65°	310	339	411	467	492	305
75°	140	198	282	280	271	152
85°	31	47	49	44	46	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	902.3	902.3	902.3	902.3	902.3
2.5°	906.7	902.3	903.8	902.3	899.4
5°	903.8	899.4	900.9	899.4	897.9
7.5°	900.9	896.4	897.9	896.4	896.4
10°	895.0	890.5	893.5	892.0	890.5
12.5°	886.1	883.2	886.1	884.6	884.6
15°	874.3	872.8	877.3	877.3	877.3
17.5°	862.5	861.0	866.9	866.9	866.9
20°	847.8	846.3	855.1	855.1	855.1
22.5°	830.1	828.6	840.4	840.4	840.4
25°	810.9	810.9	822.7	825.7	825.7
27.5°	791.7	791.7	805.0	809.4	809.4
30°	771.1	771.1	784.4	790.3	793.2
32.5°	746.0	749.0	763.7	771.1	774.1
35°	721.0	725.4	740.1	750.5	756.4
37.5°	694.4	698.9	716.6	728.3	735.7
40°	666.4	672.3	691.5	706.2	715.1
42.5°	635.5	644.3	666.4	685.6	697.4
45°	606.0	616.3	639.9	666.4	679.7
47.5°	573.5	585.3	611.9	645.8	659.1
50°	539.6	551.4	583.9	622.2	636.9
52.5°	505.7	519.0	557.3	598.6	616.3
55°	468.9	483.6	530.8	575.0	594.2
57.5°	430.5	448.2	501.3	548.5	569.1
60°	390.7	412.8	471.8	521.9	544.0
62.5°	349.4	376.0	442.3	495.4	519.0
65°	309.6	339.1	411.4	467.4	492.4
67.5°	266.9	303.7	380.4	440.8	464.4
70°	224.1	266.9	348.0	409.9	433.5
72.5°	181.3	233.0	315.5	371.5	371.5
75°	140.1	197.6	281.6	280.1	271.3
77.5°	106.2	165.1	231.5	197.6	199.0
80°	76.7	132.7	146.0	146.0	147.4
82.5°	51.6	101.7	94.4	92.9	95.8
85°	31.0	47.2	48.7	44.2	45.7
87.5°	14.7	16.2	13.3	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)