

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: P230515

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230515
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-LD5-45SE-RDP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2890.1 lumens
Efficiency: N/A
Efficacy: 72.4 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

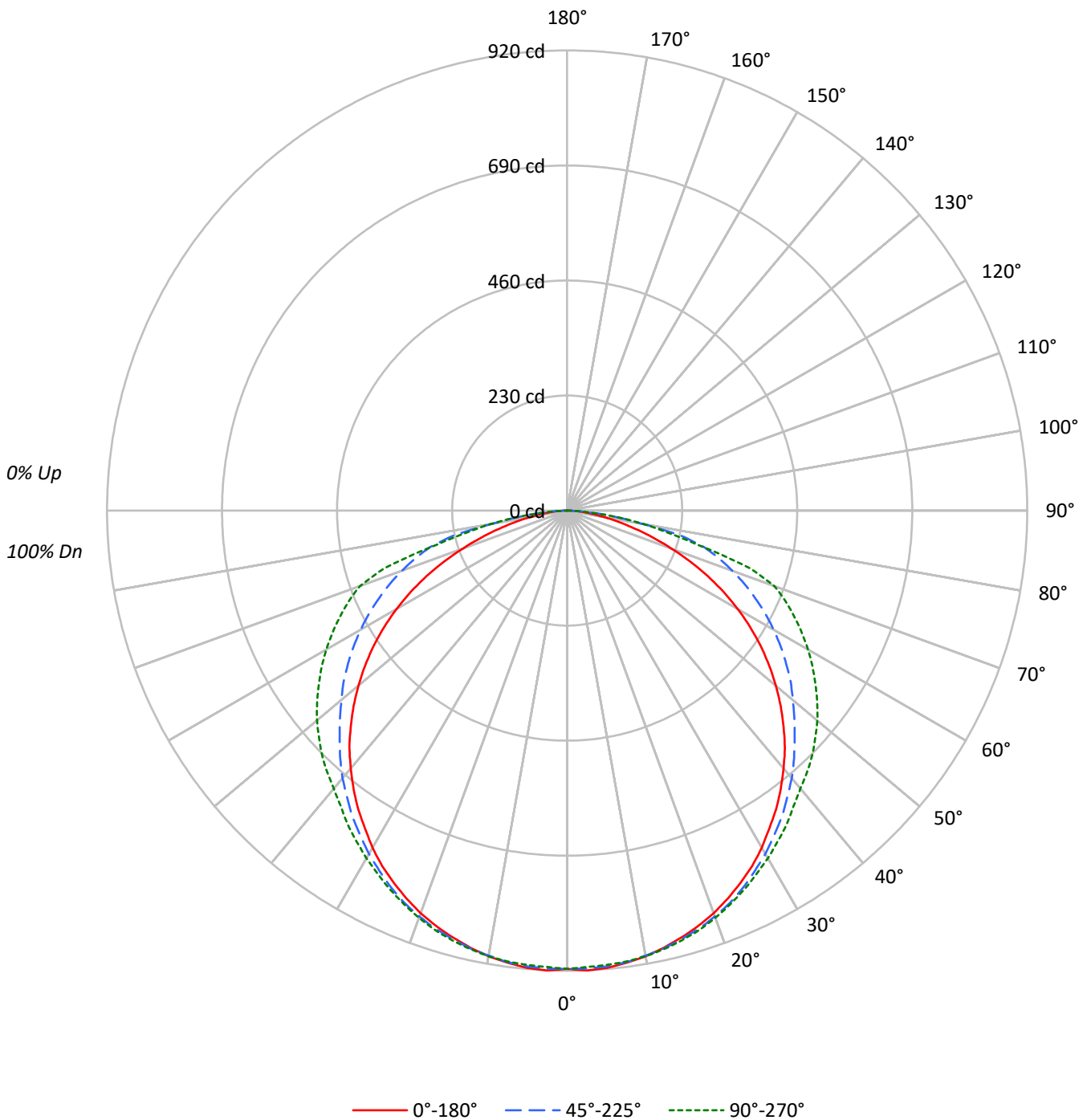
Input Watts (W): 39.91
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1233	1233	1233
5°	1239	1236	1232
10°	1236	1234	1236
15°	1231	1235	1239
20°	1226	1237	1241
25°	1219	1236	1242
30°	1209	1231	1247
35°	1196	1229	1257
40°	1182	1227	1274
45°	1164	1224	1318
50°	1141	1233	1367
55°	1108	1255	1422
60°	1061	1283	1497
65°	987	1323	1594
70°	873	1382	1735
75°	732	1479	1457
80°	584	1168	1213
85°	462	790	724



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	3.0
10°-20°	250.1	8.7
20°-30°	382.0	13.2
30°-40°	467.0	16.2
40°-50°	499.9	17.3
50°-60°	479.5	16.6
60°-70°	404.8	14.0
70°-80°	258.7	9.0
80°-90°	61.2	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°	719.0	24.9
0°-40°	1186.0	41.0
0°-60°	2165.4	74.9
0°-90°	2890.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2890.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	916	916	916	916	916	
5°	918	912	915	913	912	87
15°	884	881	886	889	889	249
25°	821	820	832	835	836	378
35°	728	734	748	758	765	455
45°	612	622	643	673	693	472
55°	472	488	535	583	606	421
65°	310	340	415	474	501	306
75°	141	201	284	290	280	152
85°	30	50	51	50	47	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	916.2	916.2	916.2	916.2	916.2
2.5°	920.5	914.8	916.2	916.2	913.4
5°	917.6	911.9	914.8	913.4	911.9
7.5°	911.9	907.7	910.5	910.5	909.1
10°	904.8	900.6	903.4	904.8	904.8
12.5°	894.9	892.0	896.3	896.3	897.7
15°	883.5	880.6	886.3	889.2	889.2
17.5°	870.7	869.3	876.4	877.8	879.2
20°	856.5	855.0	863.6	863.6	866.4
22.5°	839.4	838.0	849.3	849.3	852.2
25°	820.9	819.5	832.3	835.1	836.5
27.5°	801.0	799.5	812.3	816.6	819.5
30°	778.2	778.2	792.4	798.1	802.4
32.5°	752.6	756.9	769.7	778.2	783.9
35°	728.4	734.1	748.3	758.3	765.4
37.5°	701.4	707.1	722.7	735.5	744.1
40°	672.9	680.0	698.5	712.8	725.6
42.5°	644.5	651.6	671.5	692.8	709.9
45°	611.8	621.7	643.0	672.9	692.8
47.5°	579.0	589.0	616.0	653.0	672.9
50°	544.9	556.3	589.0	631.7	653.0
52.5°	509.3	522.1	563.4	608.9	630.2
55°	472.3	488.0	534.9	583.3	606.1
57.5°	433.9	451.0	506.5	557.7	581.9
60°	394.1	415.4	476.6	530.7	556.3
62.5°	352.8	378.4	446.7	502.2	529.2
65°	310.1	340.0	415.4	473.8	500.8
67.5°	266.0	305.9	384.1	445.3	472.3
70°	221.9	268.9	351.4	414.0	441.0
72.5°	180.7	234.7	318.7	377.0	382.7
75°	140.8	200.6	284.5	290.2	280.3
77.5°	105.3	166.5	234.7	209.1	207.7
80°	75.4	133.7	150.8	155.1	156.5
82.5°	49.8	101.0	98.2	101.0	99.6
85°	29.9	49.8	51.2	49.8	46.9
87.5°	14.2	18.5	14.2	12.8	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)