

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: P230475

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230475
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-LD5-45-RDP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2825.0 lumens
Efficiency: N/A
Efficacy: 79.2 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

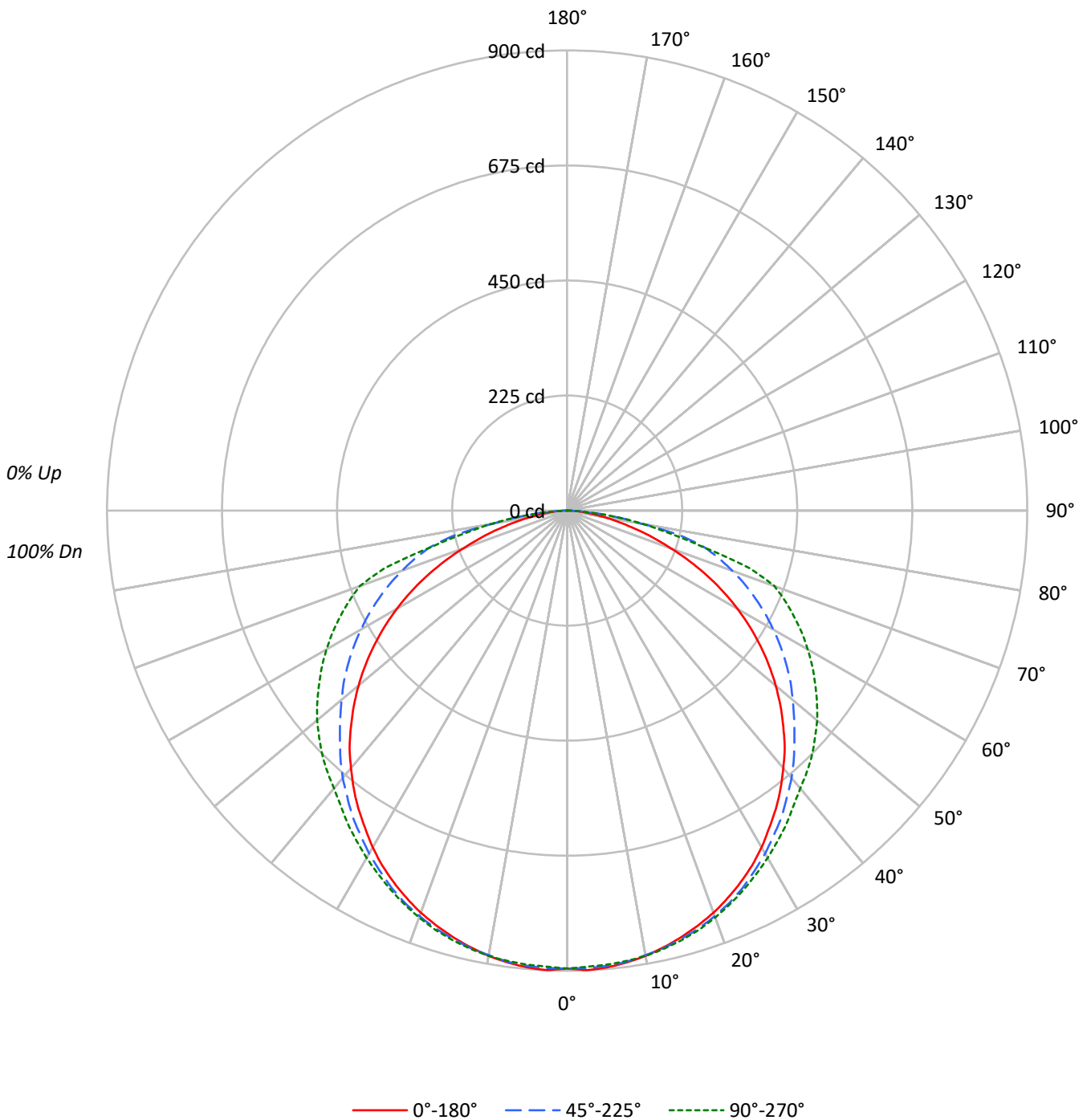
Input Watts (W): 35.69
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1205	1205	1205
5°	1211	1208	1204
10°	1208	1206	1208
15°	1203	1207	1211
20°	1199	1209	1213
25°	1191	1208	1214
30°	1182	1203	1219
35°	1169	1201	1229
40°	1155	1199	1246
45°	1138	1196	1289
50°	1115	1205	1336
55°	1083	1227	1390
60°	1037	1253	1463
65°	965	1293	1558
70°	853	1351	1696
75°	716	1446	1424
80°	571	1142	1185
85°	451	773	709



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.9	3.0
10°-20°	244.4	8.7
20°-30°	373.4	13.2
30°-40°	456.5	16.2
40°-50°	488.6	17.3
50°-60°	468.7	16.6
60°-70°	395.7	14.0
70°-80°	252.9	9.0
80°-90°	59.8	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°	702.8	24.9
0°-40°	1159.3	41.0
0°-60°	2116.5	74.9
0°-90°	2825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	897	891	894	893	891	85
15°	864	861	866	869	869	244
25°	802	801	814	816	818	370
35°	712	718	731	741	748	445
45°	598	608	628	658	677	461
55°	462	477	523	570	592	412
65°	303	332	406	463	490	299
75°	138	196	278	284	274	148
85°	29	49	50	49	46	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	895.5	895.5	895.5	895.5	895.5
2.5°	899.7	894.1	895.5	895.5	892.8
5°	896.9	891.4	894.1	892.8	891.4
7.5°	891.4	887.2	890.0	890.0	888.6
10°	884.4	880.2	883.0	884.4	884.4
12.5°	874.7	871.9	876.1	876.1	877.5
15°	863.6	860.8	866.3	869.1	869.1
17.5°	851.0	849.6	856.6	858.0	859.4
20°	837.1	835.7	844.1	844.1	846.9
22.5°	820.4	819.1	830.2	830.2	833.0
25°	802.4	801.0	813.5	816.3	817.7
27.5°	782.9	781.5	794.0	798.2	801.0
30°	760.7	760.7	774.6	780.1	784.3
32.5°	735.6	739.8	752.3	760.7	766.2
35°	712.0	717.5	731.4	741.2	748.1
37.5°	685.6	691.1	706.4	718.9	727.3
40°	657.7	664.7	682.8	696.7	709.2
42.5°	629.9	636.9	656.4	677.2	693.9
45°	598.0	607.7	628.5	657.7	677.2
47.5°	566.0	575.7	602.1	638.3	657.7
50°	532.6	543.7	575.7	617.4	638.3
52.5°	497.8	510.3	550.7	595.2	616.0
55°	461.7	477.0	522.9	570.1	592.4
57.5°	424.1	440.8	495.0	545.1	568.7
60°	385.2	406.1	465.8	518.7	543.7
62.5°	344.9	369.9	436.6	490.9	517.3
65°	303.1	332.4	406.1	463.1	489.5
67.5°	260.0	299.0	375.5	435.3	461.7
70°	216.9	262.8	343.5	404.7	431.1
72.5°	176.6	229.4	311.5	368.5	374.1
75°	137.7	196.1	278.1	283.7	273.9
77.5°	102.9	162.7	229.4	204.4	203.0
80°	73.7	130.7	147.4	151.6	153.0
82.5°	48.7	98.7	96.0	98.7	97.3
85°	29.2	48.7	50.1	48.7	45.9
87.5°	13.9	18.1	13.9	12.5	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)