

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: P230512

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230512
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-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2493.7 lumens
Efficiency: N/A
Efficacy: 62.5 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

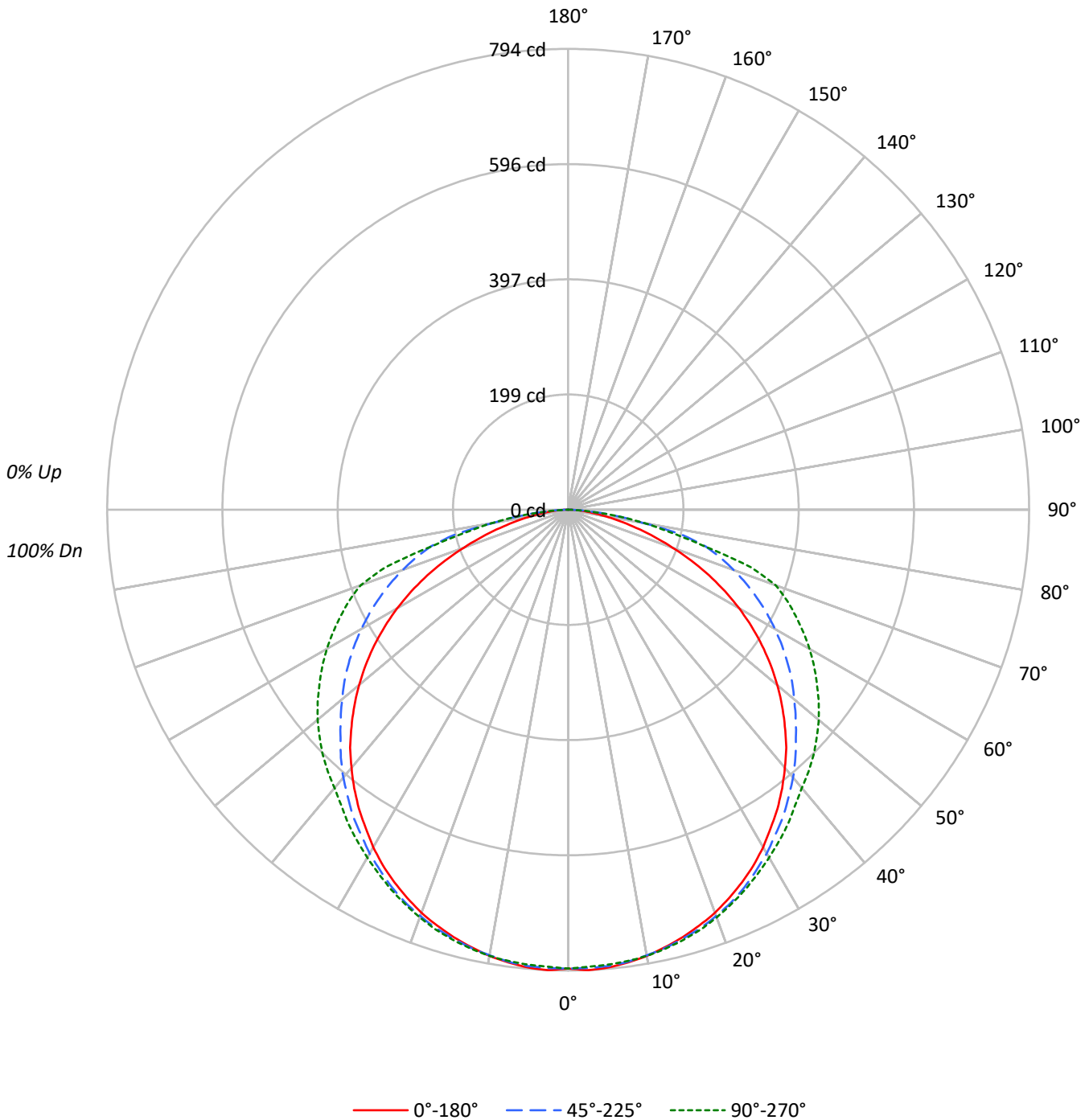
Input Watts (W): 39.91
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1064	1064	1064
5°	1069	1066	1063
10°	1067	1065	1067
15°	1062	1065	1069
20°	1058	1067	1070
25°	1052	1066	1072
30°	1043	1062	1076
35°	1032	1061	1085
40°	1020	1059	1100
45°	1004	1056	1137
50°	984	1064	1179
55°	956	1083	1227
60°	915	1107	1292
65°	852	1141	1376
70°	753	1193	1497
75°	632	1276	1257
80°	504	1008	1046
85°	398	682	625



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.0	3.0
10°-20°	215.8	8.7
20°-30°	329.6	13.2
30°-40°	403.0	16.2
40°-50°	431.3	17.3
50°-60°	413.7	16.6
60°-70°	349.3	14.0
70°-80°	223.2	9.0
80°-90°	52.8	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°	620.4	24.9
0°-40°	1023.3	41.0
0°-60°	1868.4	74.9
0°-90°	2493.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2493.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	790	790	790	790	790	
5°	792	787	789	788	787	75
15°	762	760	765	767	767	215
25°	708	707	718	721	722	326
35°	628	633	646	654	660	393
45°	528	536	555	581	598	407
55°	408	421	462	503	523	364
65°	268	293	358	409	432	264
75°	122	173	246	250	242	131
85°	26	43	44	43	40	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	790.5	790.5	790.5	790.5	790.5
2.5°	794.2	789.3	790.5	790.5	788.1
5°	791.8	786.9	789.3	788.1	786.9
7.5°	786.9	783.2	785.6	785.6	784.4
10°	780.7	777.0	779.5	780.7	780.7
12.5°	772.1	769.7	773.4	773.4	774.6
15°	762.3	759.8	764.8	767.2	767.2
17.5°	751.3	750.0	756.2	757.4	758.6
20°	739.0	737.8	745.1	745.1	747.6
22.5°	724.2	723.0	732.8	732.8	735.3
25°	708.3	707.1	718.1	720.6	721.8
27.5°	691.1	689.9	700.9	704.6	707.1
30°	671.5	671.5	683.7	688.7	692.3
32.5°	649.4	653.1	664.1	671.5	676.4
35°	628.5	633.4	645.7	654.3	660.4
37.5°	605.2	610.1	623.6	634.6	642.0
40°	580.6	586.8	602.7	615.0	626.0
42.5°	556.1	562.2	579.4	597.8	612.5
45°	527.8	536.4	554.8	580.6	597.8
47.5°	499.6	508.2	531.5	563.4	580.6
50°	470.1	480.0	508.2	545.0	563.4
52.5°	439.5	450.5	486.1	525.4	543.8
55°	407.5	421.0	461.6	503.3	522.9
57.5°	374.4	389.1	437.0	481.2	502.1
60°	340.0	358.4	411.2	457.9	480.0
62.5°	304.4	326.5	385.4	433.3	456.6
65°	267.6	293.4	358.4	408.8	432.1
67.5°	229.6	263.9	331.4	384.2	407.5
70°	191.5	232.0	303.2	357.2	380.5
72.5°	155.9	202.5	275.0	325.3	330.2
75°	121.5	173.1	245.5	250.4	241.8
77.5°	90.8	143.6	202.5	180.4	179.2
80°	65.1	115.4	130.1	133.8	135.0
82.5°	43.0	87.2	84.7	87.2	85.9
85°	25.8	43.0	44.2	43.0	40.5
87.5°	12.3	16.0	12.3	11.0	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)