

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: P230518

Luminaire Tested: **24CZ-LD5-50SE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230518
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-LD5-50SE-RDP-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2954.7 lumens
Efficiency: N/A
Efficacy: 63.5 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

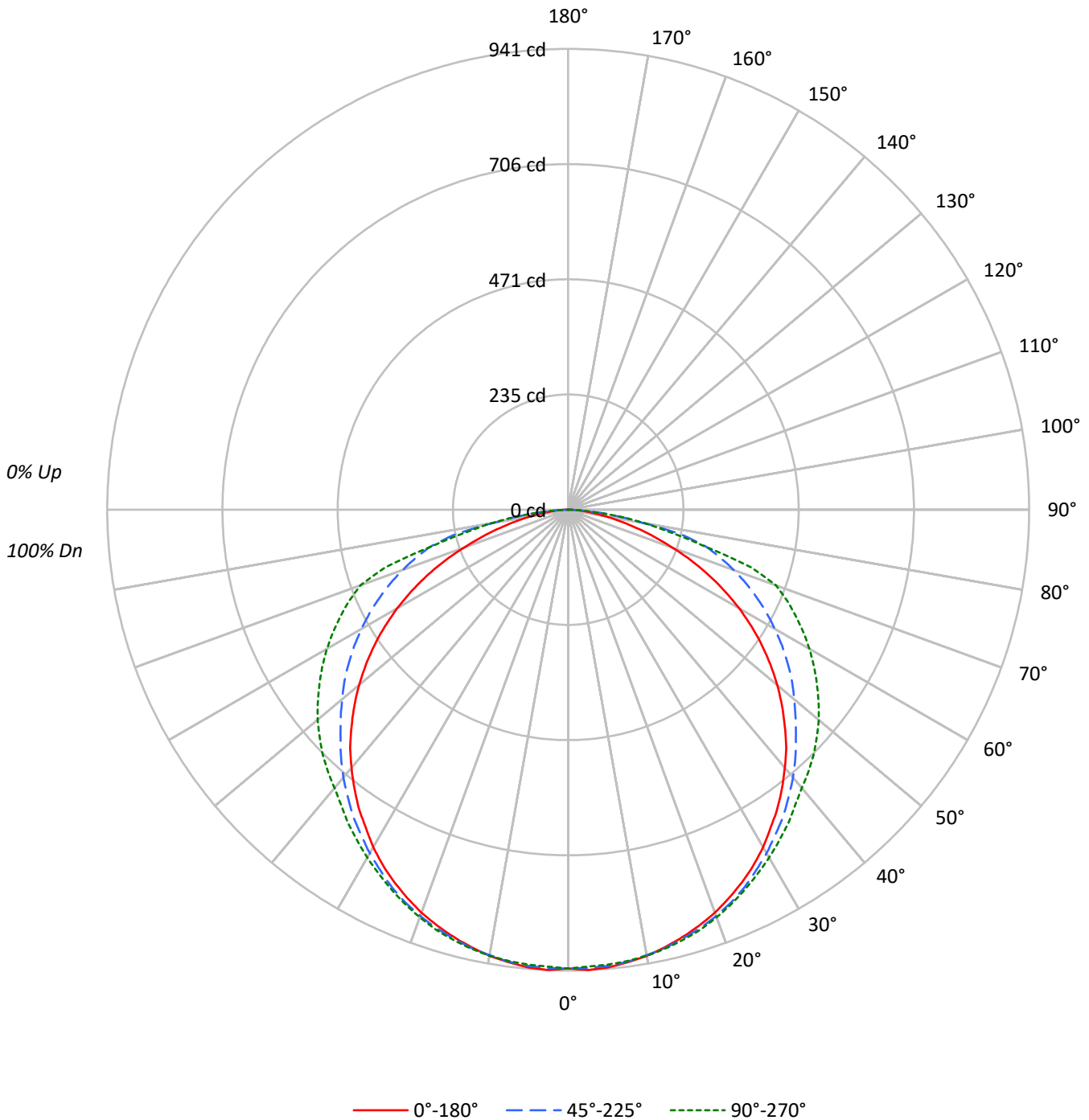
Input Watts (W): 46.56
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1260	1260	1260
5°	1267	1263	1259
10°	1264	1262	1264
15°	1258	1262	1266
20°	1254	1264	1268
25°	1246	1263	1270
30°	1236	1259	1274
35°	1223	1257	1285
40°	1208	1254	1303
45°	1190	1251	1348
50°	1166	1260	1397
55°	1133	1283	1453
60°	1084	1311	1530
65°	1010	1352	1630
70°	893	1413	1774
75°	749	1512	1489
80°	597	1195	1240
85°	471	809	741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	3.0
10°-20°	255.7	8.7
20°-30°	390.5	13.2
30°-40°	477.4	16.2
40°-50°	511.1	17.3
50°-60°	490.2	16.6
60°-70°	413.9	14.0
70°-80°	264.5	9.0
80°-90°	62.6	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°	735.0	24.9
0°-40°	1212.5	41.0
0°-60°	2213.7	74.9
0°-90°	2954.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2954.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	937	937	937	937	937	
5°	938	932	935	934	932	89
15°	903	900	906	909	909	255
25°	839	838	851	854	855	387
35°	745	750	765	775	782	466
45°	625	636	657	688	708	482
55°	483	499	547	596	620	431
65°	317	348	425	484	512	313
75°	144	205	291	297	286	155
85°	30	51	52	51	48	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	936.7	936.7	936.7	936.7	936.7
2.5°	941.0	935.2	936.7	936.7	933.8
5°	938.1	932.3	935.2	933.8	932.3
7.5°	932.3	927.9	930.8	930.8	929.4
10°	925.0	920.7	923.6	925.0	925.0
12.5°	914.8	911.9	916.3	916.3	917.8
15°	903.2	900.3	906.1	909.0	909.0
17.5°	890.1	888.7	895.9	897.4	898.8
20°	875.6	874.1	882.8	882.8	885.8
22.5°	858.1	856.7	868.3	868.3	871.2
25°	839.2	837.8	850.8	853.8	855.2
27.5°	818.9	817.4	830.5	834.9	837.8
30°	795.6	795.6	810.1	815.9	820.3
32.5°	769.4	773.8	786.9	795.6	801.4
35°	744.7	750.5	765.0	775.2	782.5
37.5°	717.0	722.9	738.9	751.9	760.7
40°	688.0	695.2	714.1	728.7	741.8
42.5°	658.9	666.1	686.5	708.3	725.8
45°	625.4	635.6	657.4	688.0	708.3
47.5°	592.0	602.1	629.8	667.6	688.0
50°	557.1	568.7	602.1	645.8	667.6
52.5°	520.7	533.8	576.0	622.5	644.3
55°	482.9	498.9	546.9	596.3	619.6
57.5°	443.6	461.1	517.8	570.1	594.9
60°	402.9	424.7	487.2	542.5	568.7
62.5°	360.7	386.9	456.7	513.4	541.1
65°	317.1	347.6	424.7	484.3	512.0
67.5°	272.0	312.7	392.7	455.2	482.9
70°	226.9	274.9	359.2	423.2	450.9
72.5°	184.7	240.0	325.8	385.4	391.2
75°	144.0	205.1	290.9	296.7	286.5
77.5°	107.6	170.2	240.0	213.8	212.3
80°	77.1	136.7	154.2	158.5	160.0
82.5°	50.9	103.3	100.4	103.3	101.8
85°	30.5	50.9	52.4	50.9	48.0
87.5°	14.5	18.9	14.5	13.1	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)