

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: P230396

Luminaire Tested: **24CZ-LD5-40-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230396
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-LD5-40-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: 2268.6 lumens
Efficiency: N/A
Efficacy: 78.1 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

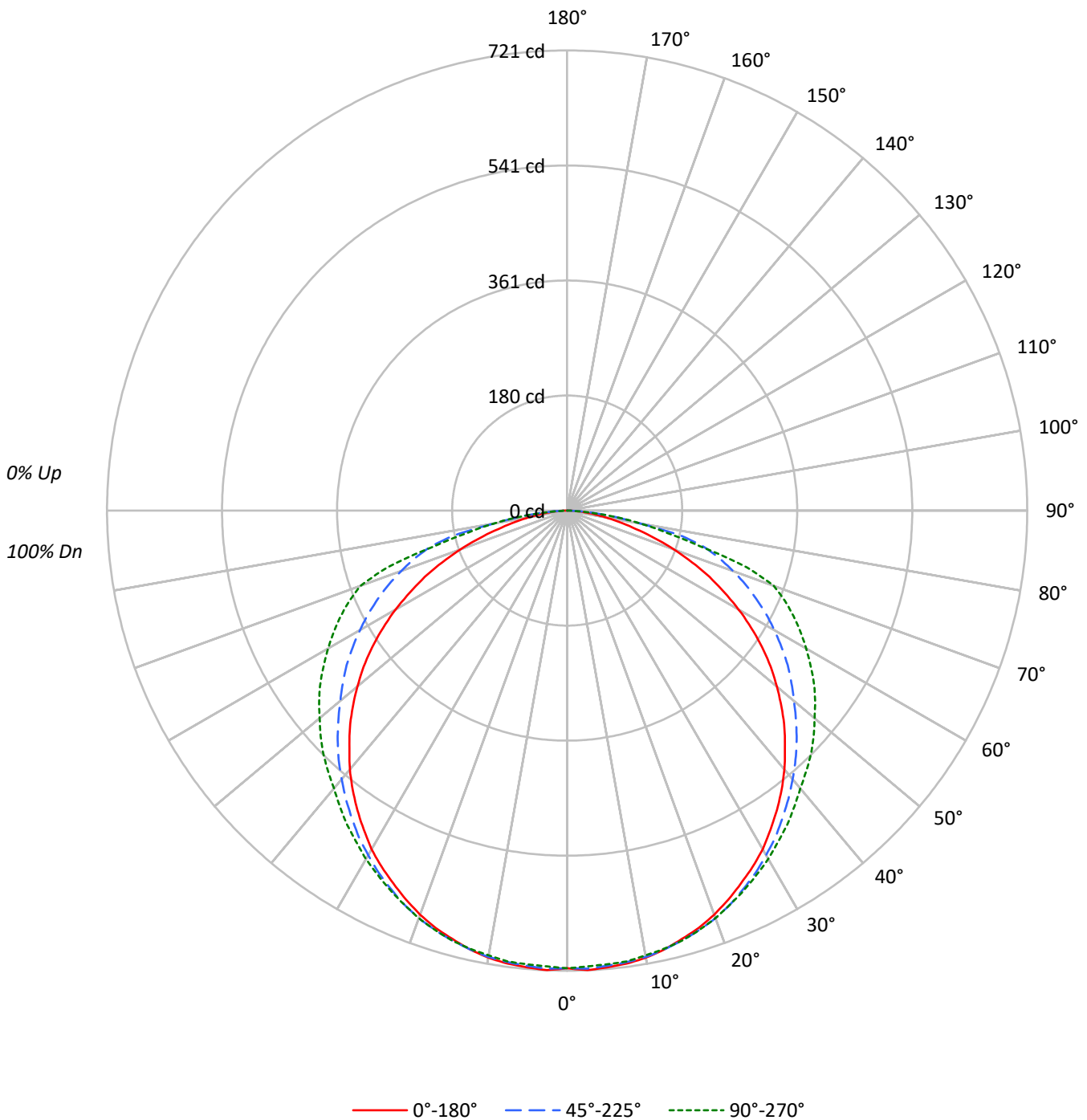
Input Watts (W): 29.04
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	965	965	965
5°	970	967	964
10°	972	970	967
15°	968	971	971
20°	965	973	973
25°	957	971	974
30°	952	969	979
35°	941	966	987
40°	930	965	998
45°	916	968	1028
50°	898	971	1060
55°	874	989	1108
60°	836	1009	1164
65°	784	1041	1246
70°	701	1088	1355
75°	579	1163	1121
80°	472	899	908
85°	380	597	560



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	3.0
10°-20°	196.5	8.7
20°-30°	300.4	13.2
30°-40°	367.4	16.2
40°-50°	393.1	17.3
50°-60°	376.4	16.6
60°-70°	318.4	14.0
70°-80°	201.8	8.9
80°-90°	46.4	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°	565.0	24.9
0°-40°	932.4	41.1
0°-60°	1701.9	75.0
0°-90°	2268.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2268.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	718	715	716	715	714	68
15°	695	694	697	697	697	196
25°	644	644	654	656	656	297
35°	573	576	588	596	601	358
45°	482	490	509	530	540	371
55°	373	384	422	457	472	332
65°	246	270	327	372	391	242
75°	111	157	224	223	216	121
85°	25	38	39	35	36	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	717.1	717.1	717.1	717.1	717.1
2.5°	720.7	717.1	718.3	717.1	714.8
5°	718.3	714.8	716.0	714.8	713.6
7.5°	716.0	712.5	713.6	712.5	712.5
10°	711.3	707.8	710.1	708.9	707.8
12.5°	704.3	701.9	704.3	703.1	703.1
15°	694.9	693.7	697.2	697.2	697.2
17.5°	685.5	684.3	689.0	689.0	689.0
20°	673.8	672.6	679.6	679.6	679.6
22.5°	659.7	658.6	667.9	667.9	667.9
25°	644.5	644.5	653.9	656.2	656.2
27.5°	629.3	629.3	639.8	643.3	643.3
30°	612.9	612.9	623.4	628.1	630.4
32.5°	592.9	595.3	607.0	612.9	615.2
35°	573.0	576.5	588.2	596.4	601.1
37.5°	551.9	555.4	569.5	578.9	584.7
40°	529.7	534.3	549.6	561.3	568.3
42.5°	505.0	512.1	529.7	544.9	554.3
45°	481.6	489.8	508.6	529.7	540.2
47.5°	455.8	465.2	486.3	513.2	523.8
50°	428.9	438.3	464.0	494.5	506.2
52.5°	401.9	412.5	442.9	475.8	489.8
55°	372.6	384.4	421.8	457.0	472.2
57.5°	342.2	356.2	398.4	435.9	452.3
60°	310.5	328.1	375.0	414.8	432.4
62.5°	277.7	298.8	351.5	393.7	412.5
65°	246.1	269.5	326.9	371.5	391.4
67.5°	212.1	241.4	302.3	350.4	369.1
70°	178.1	212.1	276.5	325.8	344.5
72.5°	144.1	185.1	250.8	295.3	295.3
75°	111.3	157.0	223.8	222.6	215.6
77.5°	84.4	131.2	184.0	157.0	158.2
80°	60.9	105.5	116.0	116.0	117.2
82.5°	41.0	80.9	75.0	73.8	76.2
85°	24.6	37.5	38.7	35.2	36.3
87.5°	11.7	12.9	10.5	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)