

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: P230448

Luminaire Tested: **24CZ-LD5-55SE-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230448
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-LD5-55SE-SQP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3170.7 lumens
Efficiency: N/A
Efficacy: 58.0 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

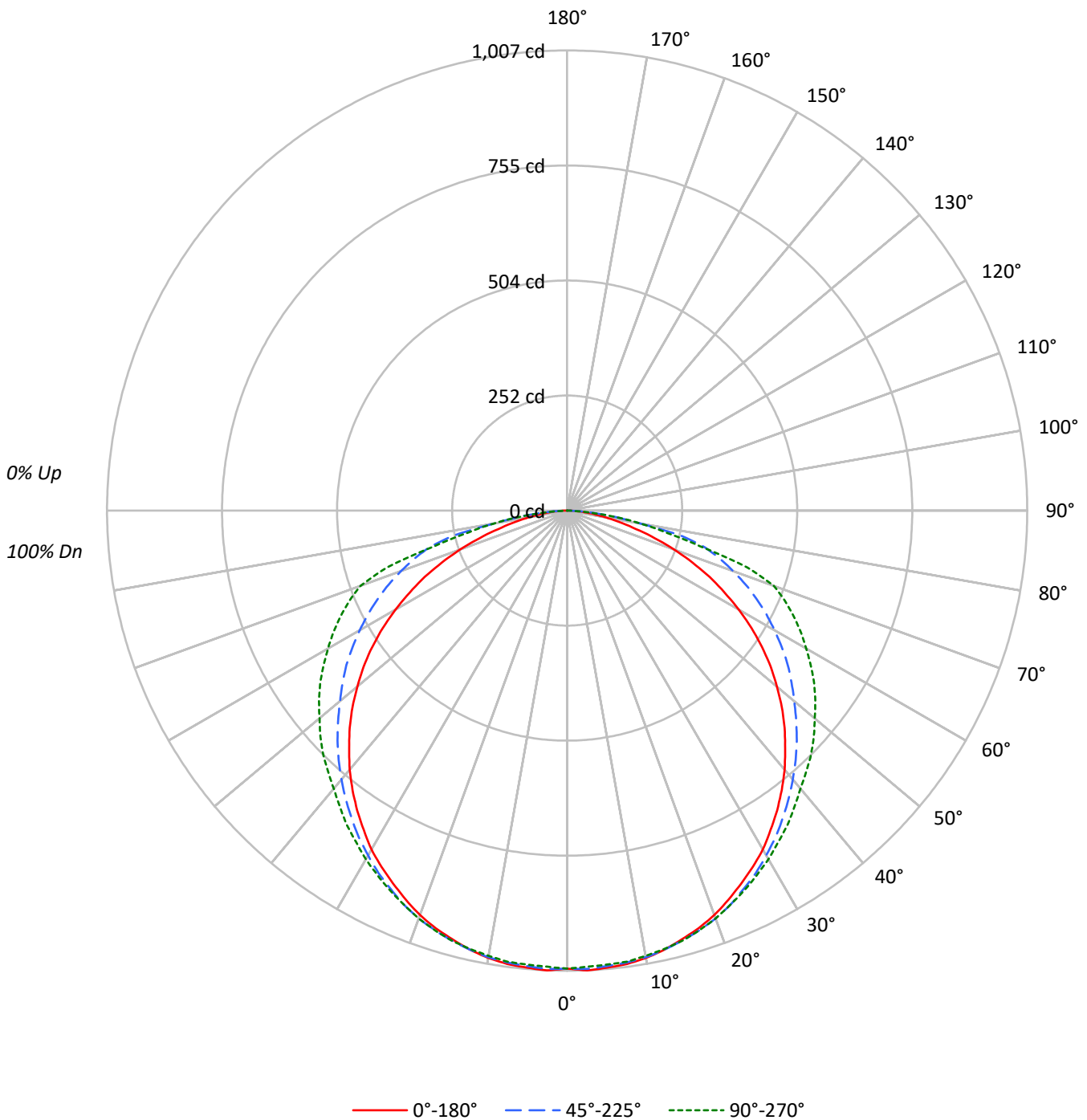
Input Watts (W): 54.69
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1349	1349	1349
5°	1356	1352	1347
10°	1358	1356	1351
15°	1353	1357	1357
20°	1348	1360	1360
25°	1337	1357	1362
30°	1331	1354	1369
35°	1316	1350	1380
40°	1300	1349	1395
45°	1281	1353	1437
50°	1255	1358	1481
55°	1222	1383	1548
60°	1168	1410	1626
65°	1095	1455	1741
70°	979	1520	1894
75°	809	1626	1567
80°	660	1256	1269
85°	531	834	784



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.2	3.0
10°-20°	274.7	8.7
20°-30°	419.8	13.2
30°-40°	513.5	16.2
40°-50°	549.4	17.3
50°-60°	526.1	16.6
60°-70°	445.0	14.0
70°-80°	282.1	8.9
80°-90°	64.9	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°	789.7	24.9
0°-40°	1303.2	41.1
0°-60°	2378.7	75.0
0°-90°	3170.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3170.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	1004	999	1001	999	997	96
15°	971	970	974	974	974	274
25°	901	901	914	917	917	416
35°	801	806	822	834	840	501
45°	673	685	711	740	755	519
55°	521	537	590	639	660	465
65°	344	377	457	519	547	339
75°	156	220	313	311	301	169
85°	34	52	54	49	51	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	1007.3	1002.3	1004.0	1002.3	999.1
5°	1004.0	999.1	1000.7	999.1	997.4
7.5°	1000.7	995.8	997.4	995.8	995.8
10°	994.2	989.2	992.5	990.9	989.2
12.5°	984.3	981.0	984.3	982.7	982.7
15°	971.2	969.6	974.5	974.5	974.5
17.5°	958.1	956.5	963.0	963.0	963.0
20°	941.7	940.1	949.9	949.9	949.9
22.5°	922.1	920.4	933.6	933.6	933.6
25°	900.8	900.8	913.9	917.2	917.2
27.5°	879.5	879.5	894.2	899.2	899.2
30°	856.6	856.6	871.3	877.9	881.1
32.5°	828.7	832.0	848.4	856.6	859.9
35°	800.9	805.8	822.2	833.6	840.2
37.5°	771.4	776.3	796.0	809.1	817.3
40°	740.3	746.8	768.1	784.5	794.3
42.5°	705.9	715.7	740.3	761.6	774.7
45°	673.1	684.6	710.8	740.3	755.0
47.5°	637.1	650.2	679.7	717.4	732.1
50°	599.4	612.5	648.6	691.2	707.5
52.5°	561.8	576.5	619.1	665.0	684.6
55°	520.8	537.2	589.6	638.7	660.0
57.5°	478.2	497.9	556.9	609.3	632.2
60°	434.0	458.6	524.1	579.8	604.4
62.5°	388.2	417.6	491.3	550.3	576.5
65°	343.9	376.7	456.9	519.2	547.0
67.5°	296.4	337.4	422.6	489.7	515.9
70°	248.9	296.4	386.5	455.3	481.5
72.5°	201.5	258.8	350.5	412.7	412.7
75°	155.6	219.5	312.8	311.2	301.4
77.5°	117.9	183.4	257.1	219.5	221.1
80°	85.2	147.4	162.1	162.1	163.8
82.5°	57.3	113.0	104.8	103.2	106.5
85°	34.4	52.4	54.0	49.1	50.8
87.5°	16.4	18.0	14.7	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)