

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: P230444

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230444
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-LD5-50SE-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: 2910.3 lumens
Efficiency: N/A
Efficacy: 62.5 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

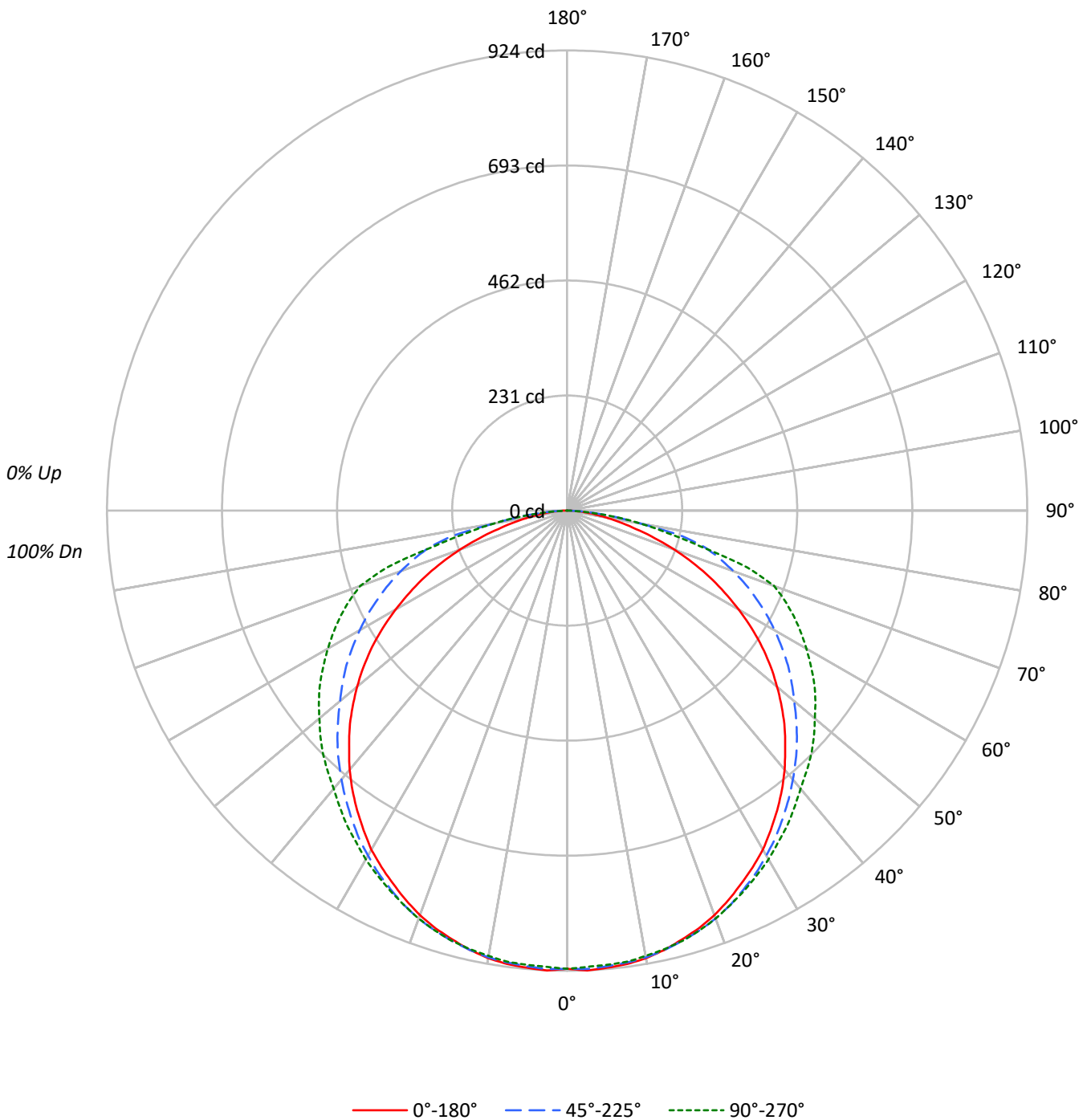
Input Watts (W): 46.56
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1238	1238	1238
5°	1245	1241	1237
10°	1247	1245	1241
15°	1242	1246	1246
20°	1238	1248	1248
25°	1227	1245	1250
30°	1221	1242	1257
35°	1207	1240	1267
40°	1193	1238	1281
45°	1176	1241	1319
50°	1152	1246	1359
55°	1121	1270	1421
60°	1072	1295	1493
65°	1005	1335	1599
70°	899	1396	1739
75°	742	1493	1438
80°	606	1153	1165
85°	488	766	719



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	3.0
10°-20°	252.1	8.7
20°-30°	385.3	13.2
30°-40°	471.3	16.2
40°-50°	504.3	17.3
50°-60°	482.9	16.6
60°-70°	408.5	14.0
70°-80°	258.9	8.9
80°-90°	59.6	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°	724.9	24.9
0°-40°	1196.2	41.1
0°-60°	2183.3	75.0
0°-90°	2910.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2910.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	922	917	918	917	916	88
15°	892	890	894	894	894	252
25°	827	827	839	842	842	381
35°	735	740	755	765	771	460
45°	618	628	652	680	693	476
55°	478	493	541	586	606	426
65°	316	346	419	476	502	311
75°	143	201	287	286	277	155
85°	32	48	50	45	47	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	920.0	920.0	920.0	920.0	920.0
2.5°	924.5	920.0	921.5	920.0	917.0
5°	921.5	917.0	918.5	917.0	915.5
7.5°	918.5	914.0	915.5	914.0	914.0
10°	912.5	908.0	911.0	909.5	908.0
12.5°	903.5	900.5	903.5	902.0	902.0
15°	891.5	889.9	894.5	894.5	894.5
17.5°	879.4	877.9	883.9	883.9	883.9
20°	864.4	862.9	871.9	871.9	871.9
22.5°	846.4	844.8	856.9	856.9	856.9
25°	826.8	826.8	838.8	841.8	841.8
27.5°	807.3	807.3	820.8	825.3	825.3
30°	786.2	786.2	799.7	805.8	808.8
32.5°	760.7	763.7	778.7	786.2	789.2
35°	735.1	739.6	754.7	765.2	771.2
37.5°	708.0	712.6	730.6	742.6	750.1
40°	679.5	685.5	705.0	720.1	729.1
42.5°	647.9	656.9	679.5	699.0	711.1
45°	617.9	628.4	652.4	679.5	693.0
47.5°	584.8	596.8	623.9	658.4	672.0
50°	550.2	562.2	595.3	634.4	649.4
52.5°	515.6	529.2	568.2	610.3	628.4
55°	478.0	493.1	541.2	586.3	605.8
57.5°	439.0	457.0	511.1	559.2	580.3
60°	398.4	420.9	481.1	532.2	554.7
62.5°	356.3	383.3	451.0	505.1	529.2
65°	315.7	345.8	419.4	476.5	502.1
67.5°	272.1	309.7	387.8	449.5	473.5
70°	228.5	272.1	354.8	417.9	442.0
72.5°	184.9	237.5	321.7	378.8	378.8
75°	142.8	201.4	287.1	285.6	276.6
77.5°	108.2	168.4	236.0	201.4	202.9
80°	78.2	135.3	148.8	148.8	150.3
82.5°	52.6	103.7	96.2	94.7	97.7
85°	31.6	48.1	49.6	45.1	46.6
87.5°	15.0	16.5	13.5	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)