

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: P230445

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230445
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-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3025.0 lumens
Efficiency: N/A
Efficacy: 65.0 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

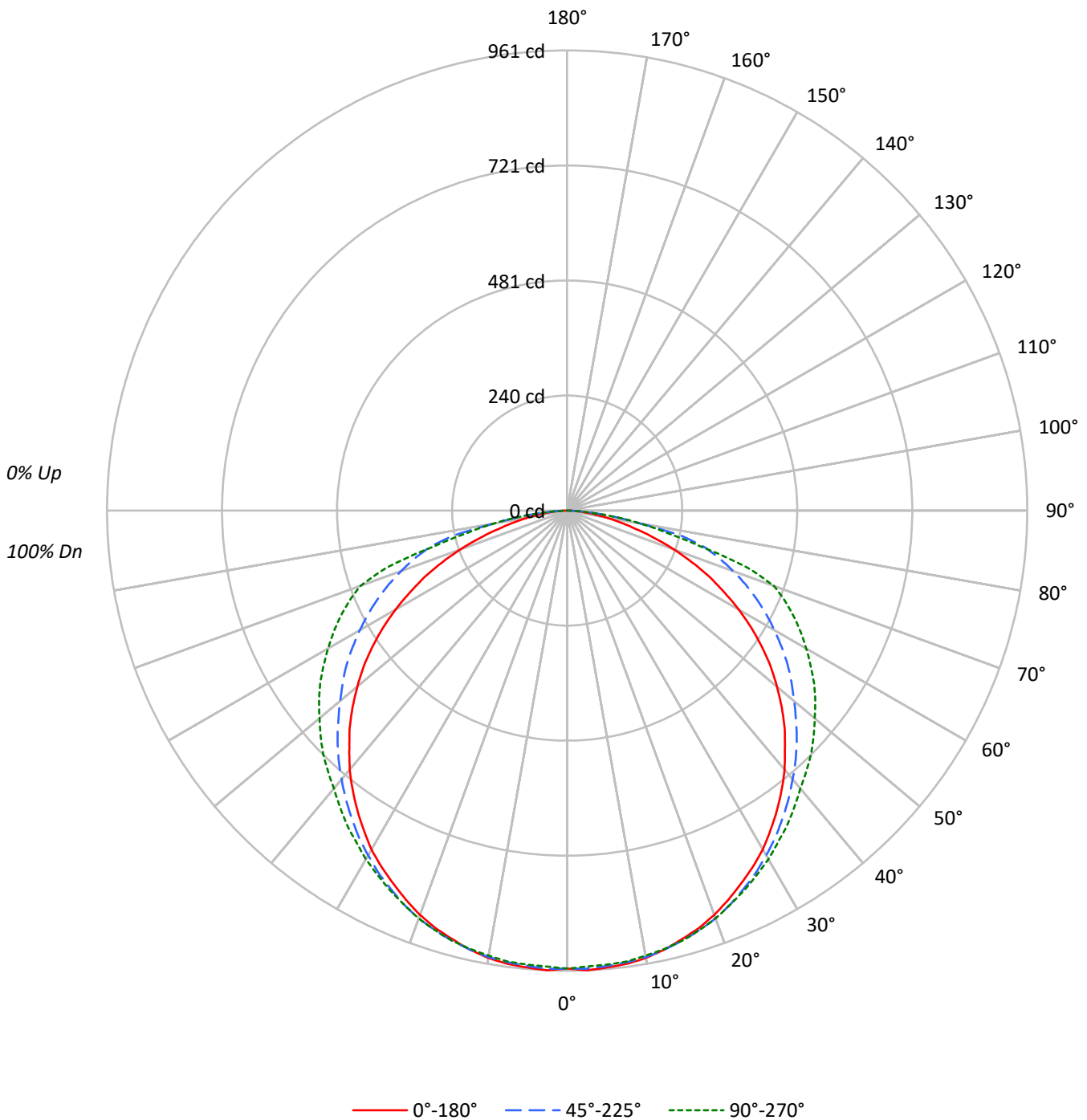
Input Watts (W): 46.56
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1287	1287	1287
5°	1294	1289	1285
10°	1296	1294	1289
15°	1291	1295	1295
20°	1287	1298	1298
25°	1276	1294	1299
30°	1270	1292	1306
35°	1255	1288	1317
40°	1241	1287	1331
45°	1222	1290	1371
50°	1197	1295	1413
55°	1166	1320	1477
60°	1114	1345	1552
65°	1045	1388	1662
70°	934	1451	1807
75°	771	1551	1495
80°	630	1199	1211
85°	506	797	747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.8	3.0
10°-20°	262.1	8.7
20°-30°	400.5	13.2
30°-40°	489.9	16.2
40°-50°	524.2	17.3
50°-60°	501.9	16.6
60°-70°	424.6	14.0
70°-80°	269.1	8.9
80°-90°	61.9	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°	753.4	24.9
0°-40°	1243.3	41.1
0°-60°	2269.4	75.0
0°-90°	3025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3025.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	958	953	955	953	952	91
15°	927	925	930	930	930	262
25°	859	859	872	875	875	397
35°	764	769	784	795	802	478
45°	642	653	678	706	720	495
55°	497	512	562	609	630	443
65°	328	359	436	495	522	323
75°	148	209	298	297	288	161
85°	33	50	52	47	48	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	956.3	956.3	956.3	956.3	956.3
2.5°	961.0	956.3	957.8	956.3	953.1
5°	957.8	953.1	954.7	953.1	951.6
7.5°	954.7	950.0	951.6	950.0	950.0
10°	948.5	943.8	946.9	945.3	943.8
12.5°	939.1	936.0	939.1	937.5	937.5
15°	926.6	925.0	929.7	929.7	929.7
17.5°	914.1	912.5	918.8	918.8	918.8
20°	898.5	896.9	906.3	906.3	906.3
22.5°	879.7	878.1	890.6	890.6	890.6
25°	859.4	859.4	871.9	875.0	875.0
27.5°	839.1	839.1	853.1	857.8	857.8
30°	817.2	817.2	831.3	837.5	840.6
32.5°	790.6	793.8	809.4	817.2	820.3
35°	764.1	768.8	784.4	795.3	801.6
37.5°	735.9	740.6	759.4	771.9	779.7
40°	706.3	712.5	732.8	748.4	757.8
42.5°	673.4	682.8	706.3	726.6	739.1
45°	642.2	653.1	678.1	706.3	720.3
47.5°	607.8	620.3	648.4	684.4	698.4
50°	571.9	584.4	618.8	659.4	675.0
52.5°	535.9	550.0	590.6	634.4	653.1
55°	496.9	512.5	562.5	609.4	629.7
57.5°	456.3	475.0	531.3	581.3	603.1
60°	414.1	437.5	500.0	553.1	576.6
62.5°	370.3	398.4	468.8	525.0	550.0
65°	328.1	359.4	435.9	495.3	521.9
67.5°	282.8	321.9	403.1	467.2	492.2
70°	237.5	282.8	368.8	434.4	459.4
72.5°	192.2	246.9	334.4	393.8	393.8
75°	148.4	209.4	298.4	296.9	287.5
77.5°	112.5	175.0	245.3	209.4	210.9
80°	81.3	140.6	154.7	154.7	156.3
82.5°	54.7	107.8	100.0	98.4	101.6
85°	32.8	50.0	51.6	46.9	48.4
87.5°	15.6	17.2	14.1	9.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)