

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: P230435

Luminaire Tested: **24CZ-LD5-35SE-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230435
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-LD5-35SE-SQP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2341.1 lumens
Efficiency: N/A
Efficacy: 81.9 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

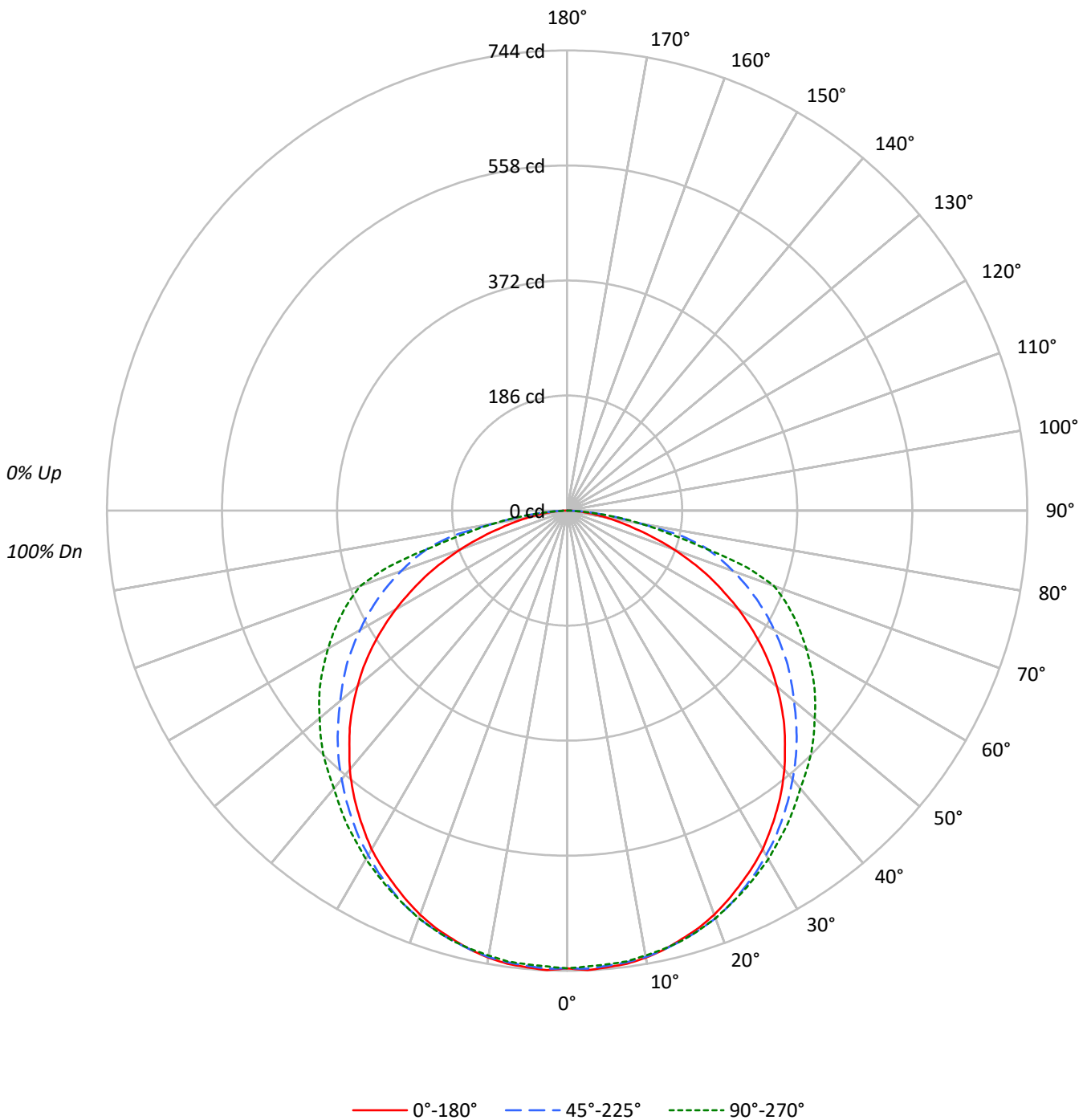
Input Watts (W): 28.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	996	996	996
5°	1001	998	995
10°	1003	1001	998
15°	999	1002	1002
20°	996	1004	1004
25°	987	1002	1005
30°	983	999	1011
35°	971	997	1019
40°	960	996	1030
45°	946	999	1061
50°	926	1002	1093
55°	902	1021	1143
60°	862	1041	1201
65°	808	1074	1286
70°	723	1123	1399
75°	597	1201	1157
80°	487	927	937
85°	392	616	579



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.3	3.0
10°-20°	202.8	8.7
20°-30°	310.0	13.2
30°-40°	379.1	16.2
40°-50°	405.7	17.3
50°-60°	388.4	16.6
60°-70°	328.6	14.0
70°-80°	208.3	8.9
80°-90°	47.9	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°	583.1	24.9
0°-40°	962.2	41.1
0°-60°	1756.3	75.0
0°-90°	2341.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2341.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	741	738	739	738	736	71
15°	717	716	720	720	720	203
25°	665	665	675	677	677	307
35°	591	595	607	616	620	370
45°	497	506	525	547	558	383
55°	384	397	435	472	487	343
65°	254	278	337	383	404	250
75°	115	162	231	230	222	125
85°	25	39	40	36	38	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	740.1	740.1	740.1	740.1	740.1
2.5°	743.7	740.1	741.3	740.1	737.7
5°	741.3	737.7	738.9	737.7	736.4
7.5°	738.9	735.2	736.4	735.2	735.2
10°	734.0	730.4	732.8	731.6	730.4
12.5°	726.8	724.4	726.8	725.6	725.6
15°	717.1	715.9	719.5	719.5	719.5
17.5°	707.4	706.2	711.0	711.0	711.0
20°	695.3	694.1	701.4	701.4	701.4
22.5°	680.8	679.6	689.3	689.3	689.3
25°	665.1	665.1	674.8	677.2	677.2
27.5°	649.4	649.4	660.3	663.9	663.9
30°	632.4	632.4	643.3	648.2	650.6
32.5°	611.9	614.3	626.4	632.4	634.9
35°	591.3	595.0	607.1	615.5	620.4
37.5°	569.6	573.2	587.7	597.4	603.4
40°	546.6	551.4	567.1	579.2	586.5
42.5°	521.2	528.5	546.6	562.3	572.0
45°	497.0	505.5	524.8	546.6	557.5
47.5°	470.4	480.1	501.8	529.7	540.5
50°	442.6	452.3	478.9	510.3	522.4
52.5°	414.8	425.7	457.1	491.0	505.5
55°	384.5	396.6	435.3	471.6	487.3
57.5°	353.1	367.6	411.2	449.8	466.8
60°	320.5	338.6	387.0	428.1	446.2
62.5°	286.6	308.4	362.8	406.3	425.7
65°	253.9	278.1	337.4	383.3	403.9
67.5°	218.9	249.1	312.0	361.6	380.9
70°	183.8	218.9	285.4	336.2	355.5
72.5°	148.7	191.1	258.8	304.7	304.7
75°	114.9	162.0	231.0	229.8	222.5
77.5°	87.1	135.4	189.9	162.0	163.3
80°	62.9	108.8	119.7	119.7	120.9
82.5°	42.3	83.4	77.4	76.2	78.6
85°	25.4	38.7	39.9	36.3	37.5
87.5°	12.1	13.3	10.9	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)