

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: P259043

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1441.0 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

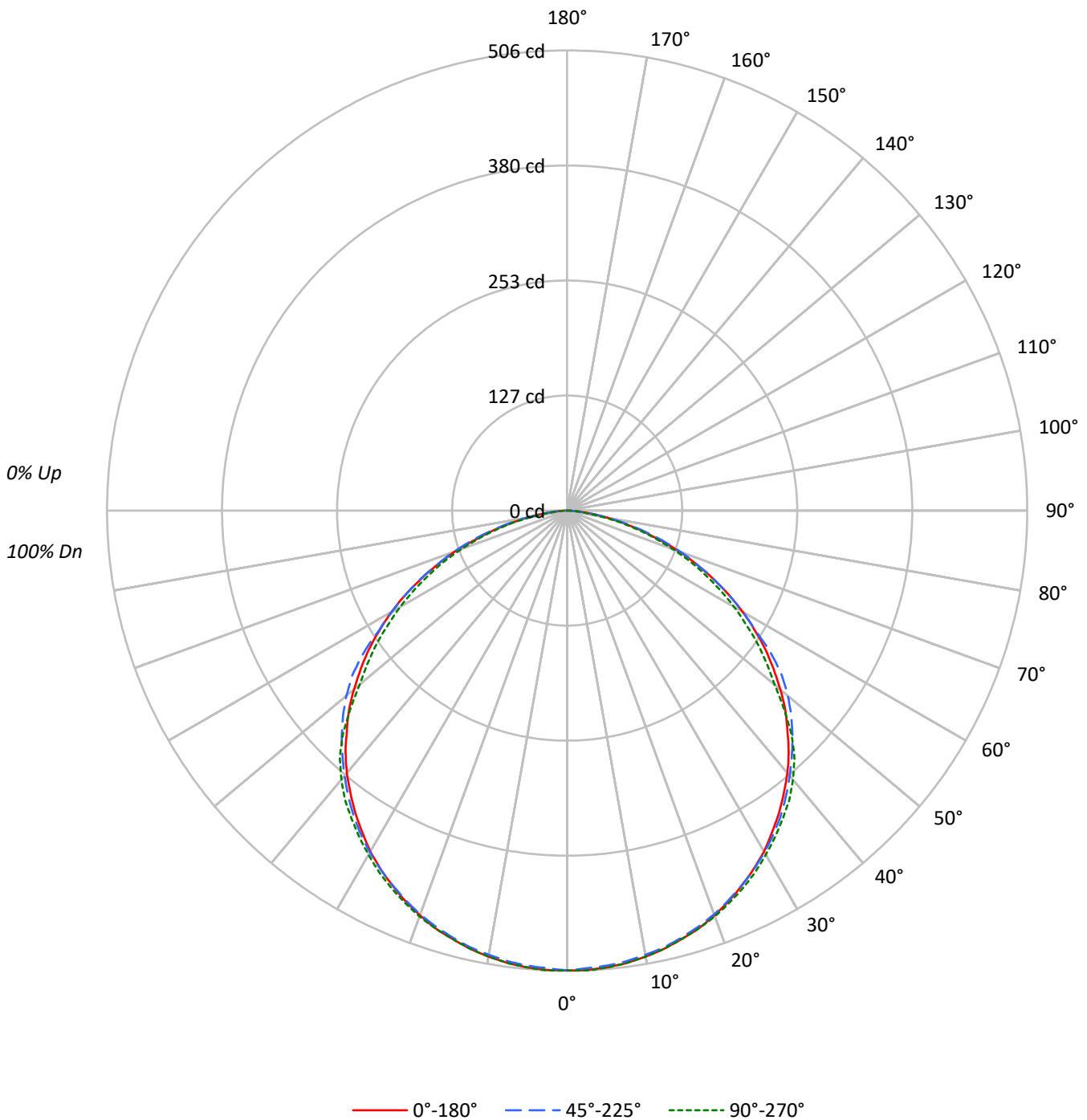
Input Watts (W): 16.089
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1361	1361	1361
5°	1362	1357	1362
10°	1361	1355	1361
15°	1358	1354	1358
20°	1356	1353	1360
25°	1351	1349	1359
30°	1345	1348	1357
35°	1334	1345	1358
40°	1324	1337	1356
45°	1304	1334	1328
50°	1281	1326	1246
55°	1248	1285	1200
60°	1201	1198	1143
65°	1125	1131	1069
70°	1033	1045	968
75°	868	909	828
80°	688	704	583
85°	451	392	330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.9	3.3
10°-20°	137.6	9.6
20°-30°	210.2	14.6
30°-40°	256.4	17.8
40°-50°	268.1	18.6
50°-60°	237.4	16.5
60°-70°	174.8	12.1
70°-80°	90.5	6.3
80°-90°	18.0	1.3
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°	395.7	27.5
0°-40°	652.1	45.3
0°-60°	1157.7	80.3
0°-90°	1441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1441.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	506	506	506	506	506	
5°	504	504	502	504	504	48
15°	488	488	486	488	488	138
25°	455	455	454	457	458	210
35°	406	407	410	413	413	254
45°	343	346	350	353	349	265
55°	266	271	274	260	256	237
65°	177	187	178	171	168	175
75°	84	89	87	82	80	89
85°	15	16	13	11	11	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	505.7	505.7	505.7	505.7	505.7
2.5°	505.7	505.7	503.7	505.7	506.2
5°	504.2	504.2	502.3	504.2	504.2
7.5°	501.8	501.3	499.8	501.8	501.8
10°	497.9	497.9	495.9	498.4	497.9
12.5°	493.5	493.0	492.0	494.0	493.5
15°	487.6	487.6	486.1	488.1	487.6
17.5°	481.8	481.3	479.8	481.8	481.8
20°	473.5	473.0	472.5	474.4	474.9
22.5°	464.7	464.2	463.7	466.6	466.6
25°	454.9	454.9	454.4	457.4	457.8
27.5°	444.2	444.2	444.7	448.6	448.1
30°	432.9	432.9	433.9	436.8	436.8
32.5°	419.3	420.3	422.2	425.6	425.6
35°	406.1	407.1	409.5	413.4	413.4
37.5°	391.5	392.9	395.4	400.2	401.2
40°	376.8	377.8	380.7	386.1	386.1
42.5°	360.7	361.7	365.6	371.0	370.0
45°	342.6	345.6	350.5	353.4	349.0
47.5°	325.6	327.5	334.3	330.9	323.6
50°	306.0	309.9	316.8	304.6	297.7
52.5°	286.0	290.4	297.7	280.7	276.8
55°	266.0	271.4	273.8	259.7	255.8
57.5°	244.5	250.4	245.5	237.2	233.3
60°	223.1	229.9	222.6	214.8	212.3
62.5°	200.6	208.4	200.1	193.3	189.9
65°	176.7	187.4	177.7	170.8	167.9
67.5°	153.3	164.5	154.2	148.4	146.4
70°	131.3	137.6	132.8	126.9	123.0
72.5°	104.9	111.3	110.3	104.0	101.5
75°	83.5	89.3	87.4	82.0	79.6
77.5°	62.0	68.3	66.4	60.0	59.1
80°	44.4	48.8	45.4	39.5	37.6
82.5°	27.8	31.2	26.8	22.5	21.5
85°	14.6	15.6	12.7	11.2	10.7
87.5°	4.9	5.4	5.4	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)