

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: P259073

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259073
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-L93050-W2A1-U-4500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER
WITH SQP LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1270.0 lumens
Efficiency: N/A
Efficacy: 79.4 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

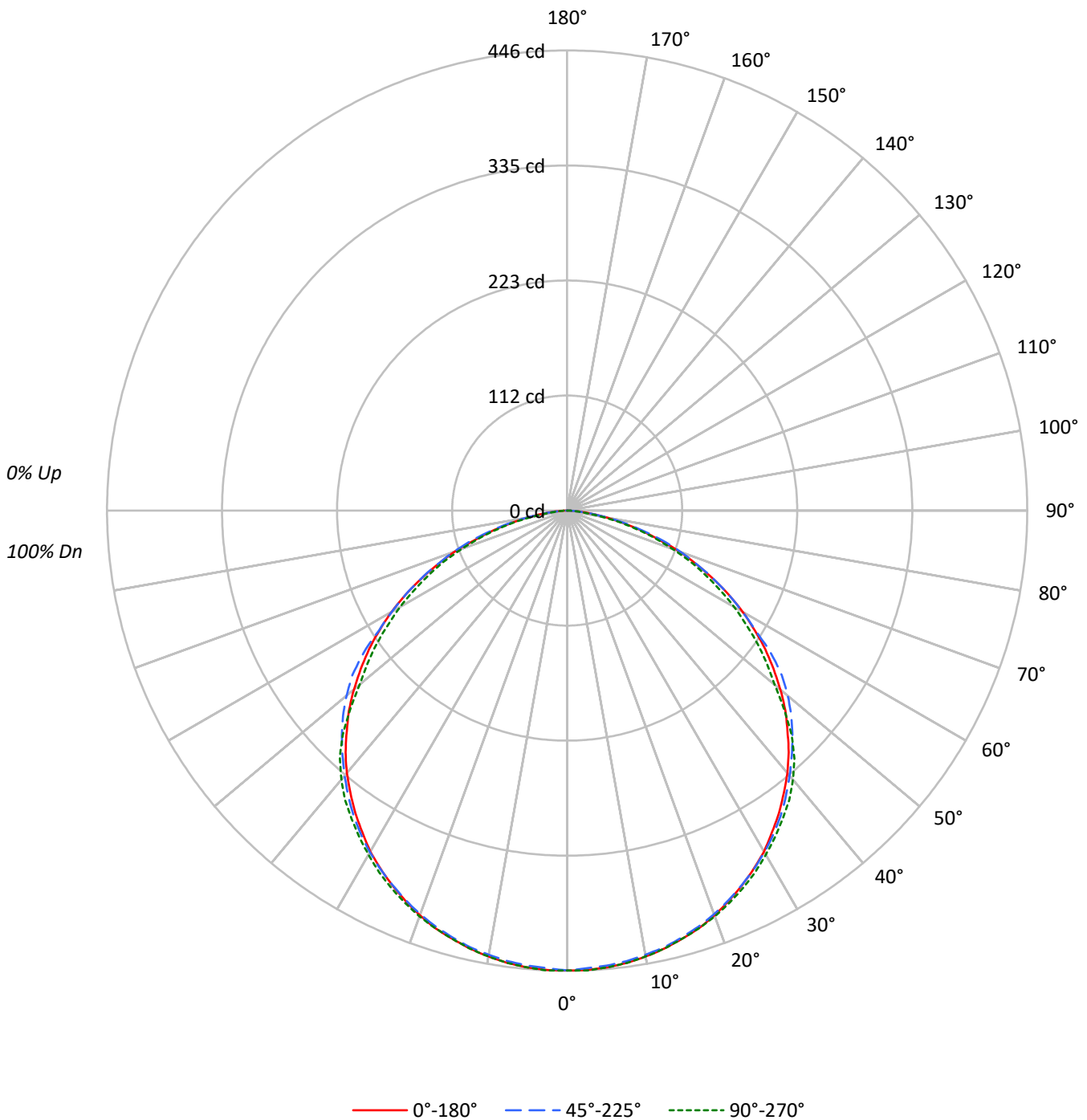
Input Watts (W): 15.996
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1199	1199	1199
5°	1200	1196	1200
10°	1199	1194	1199
15°	1197	1194	1197
20°	1195	1192	1199
25°	1190	1189	1198
30°	1186	1188	1196
35°	1176	1186	1197
40°	1167	1179	1195
45°	1149	1176	1171
50°	1129	1169	1099
55°	1100	1132	1057
60°	1058	1056	1007
65°	991	997	942
70°	910	921	853
75°	765	801	729
80°	606	620	513
85°	398	346	293



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.2	3.3
10°-20°	121.3	9.6
20°-30°	185.2	14.6
30°-40°	226.0	17.8
40°-50°	236.3	18.6
50°-60°	209.2	16.5
60°-70°	154.1	12.1
70°-80°	79.8	6.3
80°-90°	15.9	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°	348.7	27.5
0°-40°	574.7	45.3
0°-60°	1020.3	80.3
0°-90°	1270.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1270.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	444	444	443	444	444	42
15°	430	430	428	430	430	121
25°	401	401	400	403	404	185
35°	358	359	361	364	364	224
45°	302	305	309	311	308	233
55°	234	239	241	229	225	209
65°	156	165	157	151	148	154
75°	74	79	77	72	70	79
85°	13	14	11	10	10	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	445.7	445.7	445.7	445.7	445.7
2.5°	445.7	445.7	443.9	445.7	446.1
5°	444.4	444.4	442.7	444.4	444.4
7.5°	442.2	441.8	440.5	442.2	442.2
10°	438.8	438.8	437.1	439.2	438.8
12.5°	434.9	434.5	433.6	435.3	434.9
15°	429.7	429.7	428.5	430.2	429.7
17.5°	424.6	424.2	422.9	424.6	424.6
20°	417.3	416.8	416.4	418.1	418.6
22.5°	409.5	409.1	408.7	411.3	411.3
25°	400.9	400.9	400.5	403.1	403.5
27.5°	391.5	391.5	391.9	395.3	394.9
30°	381.6	381.6	382.4	385.0	385.0
32.5°	369.5	370.4	372.1	375.1	375.1
35°	357.9	358.8	360.9	364.4	364.4
37.5°	345.0	346.3	348.4	352.7	353.6
40°	332.1	333.0	335.5	340.3	340.3
42.5°	317.9	318.8	322.2	326.9	326.1
45°	302.0	304.6	308.9	311.4	307.6
47.5°	286.9	288.6	294.7	291.7	285.2
50°	269.7	273.2	279.2	268.4	262.4
52.5°	252.1	256.0	262.4	247.4	243.9
55°	234.4	239.2	241.3	228.9	225.4
57.5°	215.5	220.7	216.4	209.1	205.6
60°	196.6	202.6	196.2	189.3	187.1
62.5°	176.8	183.7	176.4	170.4	167.3
65°	155.7	165.2	156.6	150.6	148.0
67.5°	135.1	145.0	135.9	130.8	129.1
70°	115.7	121.3	117.0	111.8	108.4
72.5°	92.5	98.1	97.2	91.6	89.5
75°	73.6	78.7	77.0	72.3	70.1
77.5°	54.6	60.2	58.5	52.9	52.1
80°	39.1	43.0	40.0	34.8	33.1
82.5°	24.5	27.5	23.7	19.8	18.9
85°	12.9	13.8	11.2	9.9	9.5
87.5°	4.3	4.7	4.7	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)