

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: P259424

Luminaire Tested: **22CZ-LD5-34-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259424
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-34-S-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3273.0 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

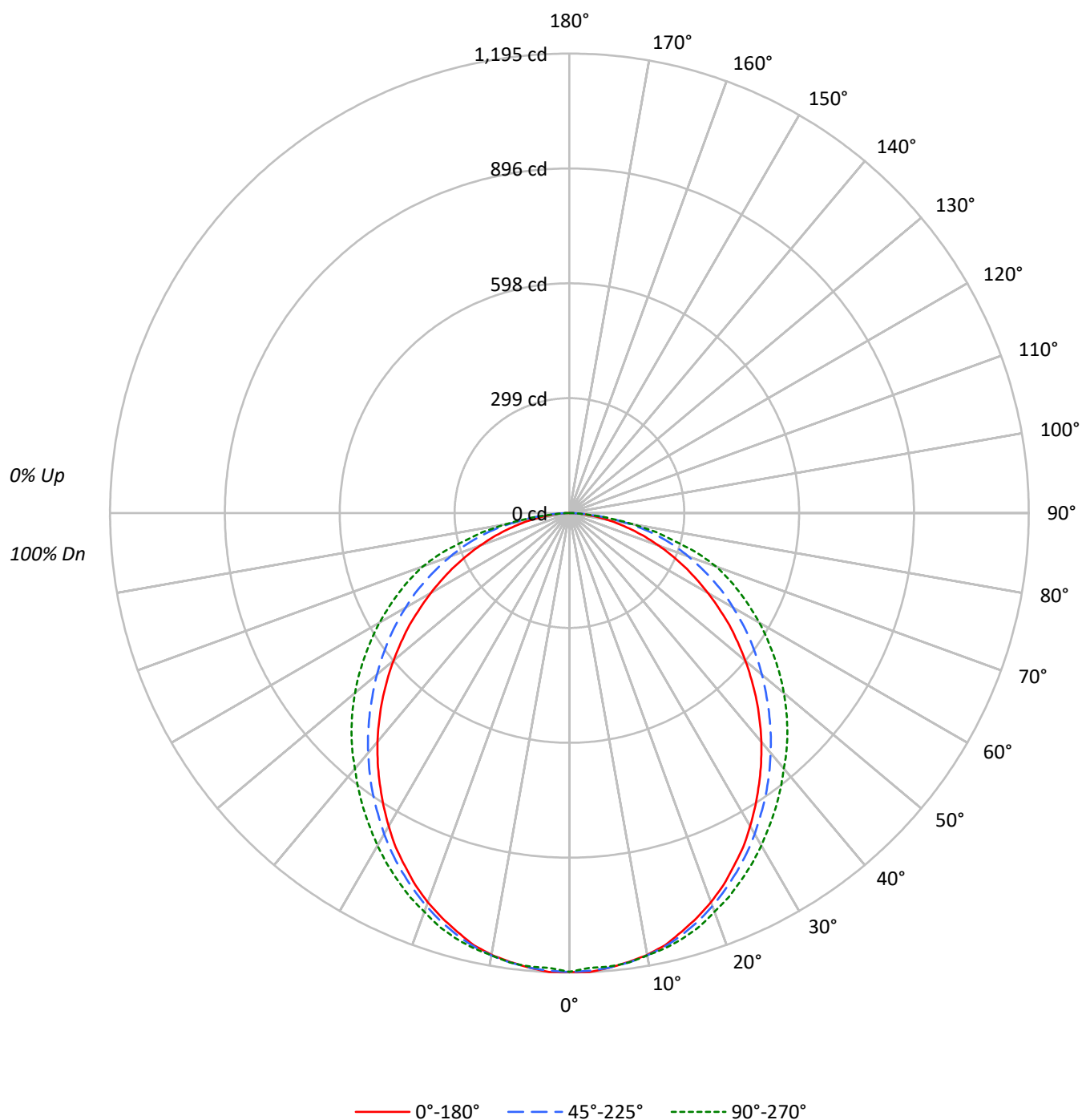
Input Watts (W): 26.746056
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3211	3211	3211
5°	3206	3206	3198
10°	3187	3192	3192
15°	3140	3162	3188
20°	3084	3115	3160
25°	3006	3057	3132
30°	2921	2994	3102
35°	2825	2928	3073
40°	2728	2860	3048
45°	2621	2794	3051
50°	2501	2738	3047
55°	2382	2692	3046
60°	2242	2648	3071
65°	2102	2613	3113
70°	1942	2585	3191
75°	1749	2566	2958
80°	1534	2388	2582
85°	1263	1797	1602



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	3.4
10°-20°	320.1	9.8
20°-30°	475.4	14.5
30°-40°	559.6	17.1
40°-50°	570.5	17.4
50°-60°	514.5	15.7
60°-70°	405.3	12.4
70°-80°	250.0	7.6
80°-90°	64.9	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°	908.2	27.7
0°-40°	1467.8	44.8
0°-60°	2552.8	78.0
0°-90°	3273.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3273.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1193	1193	1193	1193	1193	
5°	1187	1188	1187	1185	1184	113
15°	1127	1132	1135	1141	1144	318
25°	1012	1019	1030	1047	1055	466
35°	860	869	891	920	935	538
45°	689	700	734	778	802	531
55°	508	525	574	626	649	453
65°	330	354	410	462	489	327
75°	168	196	247	275	284	179
85°	41	52	58	55	52	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1193.2	1193.2	1193.2	1193.2	1193.2
2.5°	1194.8	1194.8	1191.6	1188.5	1183.8
5°	1186.9	1188.5	1186.9	1185.3	1183.8
7.5°	1177.5	1179.1	1179.1	1179.1	1179.1
10°	1166.5	1168.0	1168.0	1168.0	1168.0
12.5°	1150.8	1152.3	1153.9	1155.5	1158.6
15°	1127.2	1131.9	1135.0	1141.3	1144.5
17.5°	1103.6	1108.3	1113.0	1120.9	1127.2
20°	1076.9	1080.0	1087.9	1097.3	1103.6
22.5°	1047.0	1051.7	1059.6	1072.2	1081.6
25°	1012.4	1018.7	1029.7	1047.0	1054.9
27.5°	979.4	984.1	998.3	1017.1	1028.1
30°	940.1	946.4	963.7	987.3	998.3
32.5°	900.8	908.7	927.5	954.2	966.8
35°	859.9	869.4	891.4	919.7	935.4
37.5°	819.0	828.5	853.6	885.1	902.4
40°	776.6	786.0	814.3	848.9	867.8
42.5°	732.6	743.6	775.0	814.3	836.3
45°	688.6	699.6	734.2	778.2	801.8
47.5°	643.0	655.6	693.3	742.0	765.6
50°	597.4	611.5	654.0	704.3	727.9
52.5°	551.8	567.5	613.1	665.0	690.1
55°	507.8	525.1	573.8	625.7	649.3
57.5°	460.6	481.1	532.9	583.2	610.0
60°	416.6	438.6	492.1	542.4	570.7
62.5°	372.6	396.2	452.8	503.1	529.8
65°	330.1	353.7	410.3	462.2	488.9
67.5°	287.7	314.4	369.4	421.3	448.0
70°	246.8	275.1	328.6	378.9	405.6
72.5°	207.5	235.8	289.3	336.4	352.1
75°	168.2	196.5	246.8	275.1	284.5
77.5°	132.1	158.8	202.8	220.1	232.7
80°	99.0	122.6	154.1	165.1	166.6
82.5°	67.6	88.0	106.9	108.5	106.9
85°	40.9	51.9	58.2	55.0	51.9
87.5°	18.9	20.4	18.9	12.6	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)