

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: P277410

Luminaire Tested: **22CZ2-34HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3371.0 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

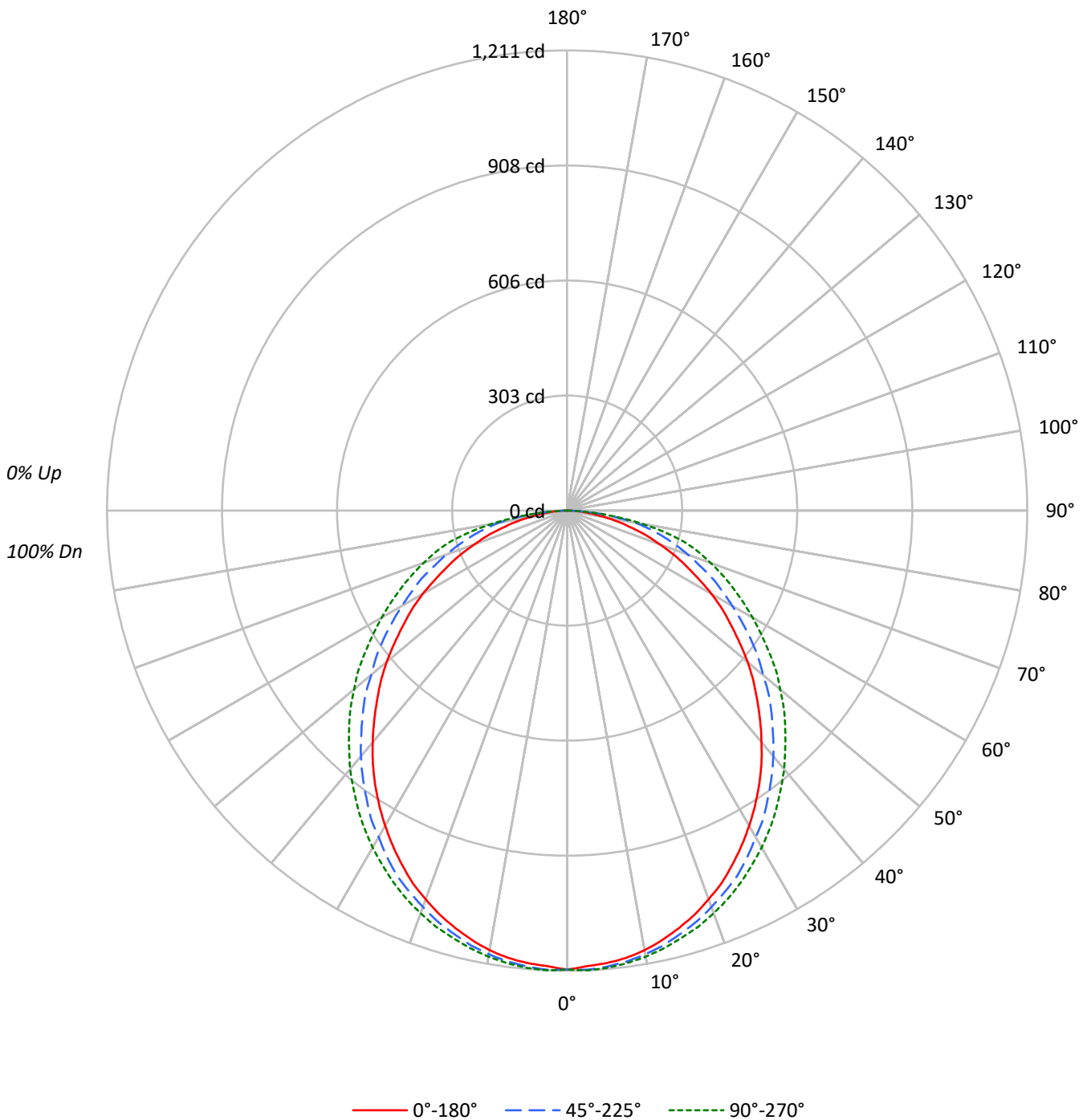
Input Watts (W): 25.947
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3250	3250	3250
5°	3229	3254	3263
10°	3210	3240	3258
15°	3168	3212	3243
20°	3117	3180	3229
25°	3054	3148	3208
30°	2976	3084	3182
35°	2893	3028	3152
40°	2796	2967	3121
45°	2694	2897	3089
50°	2594	2818	3062
55°	2472	2767	3040
60°	2362	2700	3031
65°	2203	2684	3065
70°	2029	2661	3156
75°	1832	2698	3320
80°	1584	2779	3119
85°	1312	2331	2331



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.2	3.4
10°-20°	325.1	9.6
20°-30°	486.4	14.4
30°-40°	576.0	17.1
40°-50°	587.1	17.4
50°-60°	526.2	15.6
60°-70°	411.9	12.2
70°-80°	265.6	7.9
80°-90°	78.5	2.3
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°	925.7	27.5
0°-40°	1501.8	44.5
0°-60°	2615.0	77.6
0°-90°	3371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3371.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1195	1198	1205	1206	1208	113
15°	1137	1143	1153	1162	1164	321
25°	1029	1038	1060	1074	1080	474
35°	881	892	922	950	959	550
45°	708	724	761	801	812	547
55°	527	544	590	631	648	472
65°	346	366	422	462	481	344
75°	176	203	260	304	319	189
85°	42	58	76	76	76	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.9	1207.9	1207.9	1207.9	1207.9
2.5°	1200.1	1203.2	1209.5	1211.1	1211.1
5°	1195.4	1198.5	1204.8	1206.4	1207.9
7.5°	1187.5	1189.1	1196.9	1200.1	1201.6
10°	1174.9	1178.1	1185.9	1190.6	1192.2
12.5°	1157.6	1162.3	1171.8	1178.1	1179.6
15°	1137.2	1143.4	1152.9	1162.3	1163.9
17.5°	1115.1	1121.4	1134.0	1145.0	1148.2
20°	1088.4	1096.3	1110.4	1123.0	1127.7
22.5°	1061.7	1068.0	1085.3	1101.0	1105.7
25°	1028.6	1038.1	1060.1	1074.2	1080.5
27.5°	994.0	1005.0	1027.1	1045.9	1052.2
30°	957.9	968.9	992.5	1016.0	1023.9
32.5°	920.1	932.7	961.0	984.6	992.5
35°	880.8	891.8	921.7	950.0	959.4
37.5°	839.9	849.3	883.9	913.8	923.3
40°	795.9	808.4	844.6	879.2	888.6
42.5°	751.8	766.0	802.1	839.9	849.3
45°	707.8	723.5	761.3	800.6	811.6
47.5°	665.3	677.9	720.4	758.1	773.8
50°	619.7	632.3	673.2	715.6	731.4
52.5°	572.5	589.8	633.9	674.7	693.6
55°	526.9	544.2	589.8	630.7	648.0
57.5°	484.4	498.6	545.8	588.2	605.5
60°	438.8	451.4	501.7	547.3	563.1
62.5°	390.1	408.9	460.8	503.3	522.2
65°	346.0	366.5	421.5	462.4	481.3
67.5°	305.1	324.0	377.5	421.5	442.0
70°	257.9	283.1	338.2	382.2	401.1
72.5°	220.2	242.2	298.8	342.9	363.3
75°	176.2	202.9	259.5	303.6	319.3
77.5°	140.0	166.7	220.2	254.8	262.7
80°	102.2	129.0	179.3	196.6	201.3
82.5°	69.2	94.4	129.0	133.7	135.3
85°	42.5	58.2	75.5	75.5	75.5
87.5°	20.4	23.6	26.7	25.2	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)