

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: P277411

Luminaire Tested: **22CZ2-34HE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277411
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-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3430.0 lumens
Efficiency: N/A
Efficacy: 131.3 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

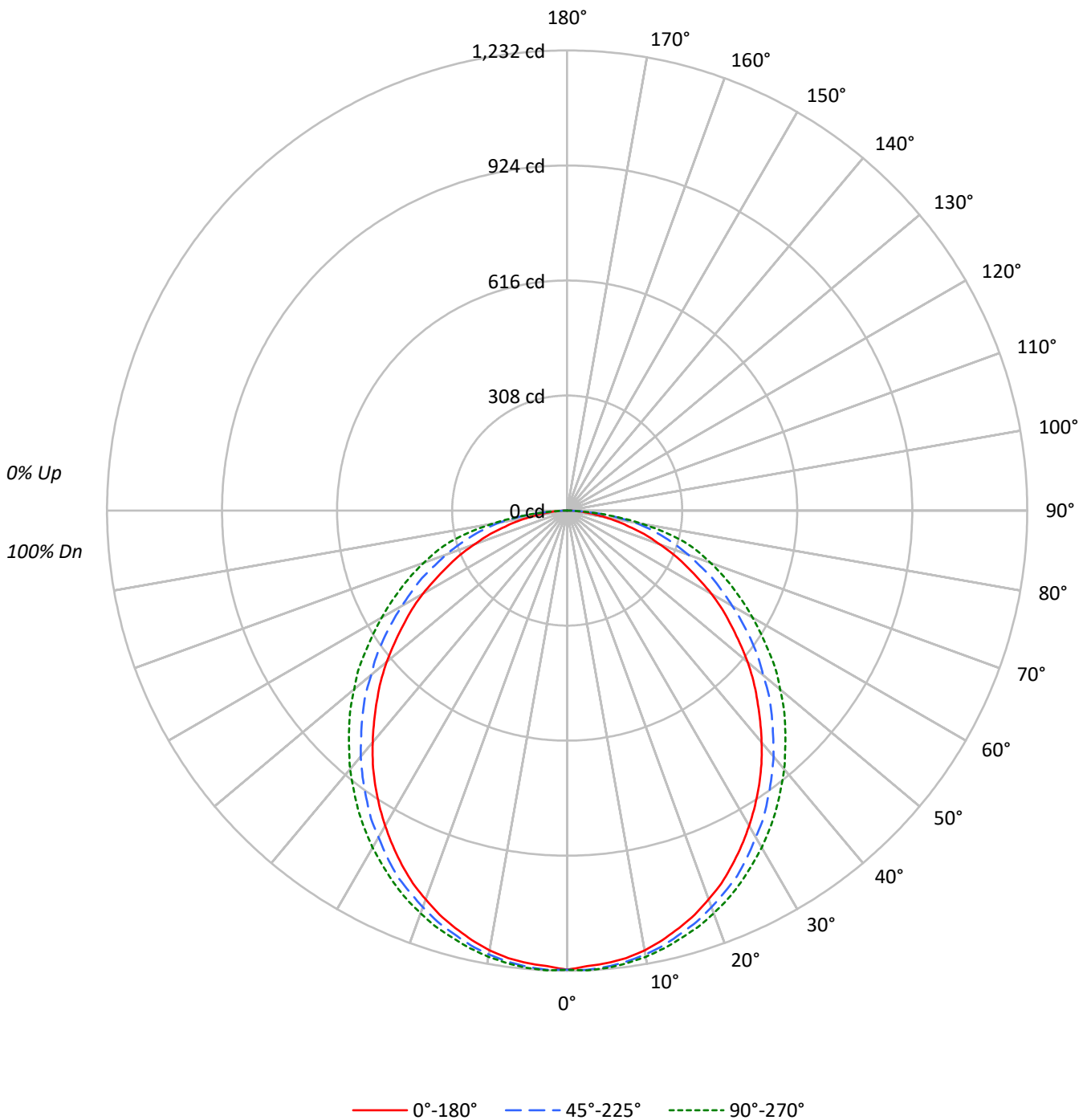
Input Watts (W): 26.133
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3307	3307	3307
5°	3286	3311	3320
10°	3267	3297	3315
15°	3224	3268	3299
20°	3171	3236	3286
25°	3108	3203	3264
30°	3028	3138	3237
35°	2944	3081	3207
40°	2845	3019	3176
45°	2741	2948	3143
50°	2640	2868	3116
55°	2515	2815	3093
60°	2403	2747	3083
65°	2242	2731	3118
70°	2065	2707	3211
75°	1863	2746	3378
80°	1612	2827	3174
85°	1334	2371	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	3.4
10°-20°	330.8	9.6
20°-30°	494.9	14.4
30°-40°	586.1	17.1
40°-50°	597.3	17.4
50°-60°	535.3	15.6
60°-70°	419.2	12.2
70°-80°	270.3	7.9
80°-90°	79.8	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°	941.9	27.5
0°-40°	1528.0	44.5
0°-60°	2660.7	77.6
0°-90°	3430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1216	1220	1226	1228	1229	115
15°	1157	1164	1173	1183	1184	326
25°	1047	1056	1079	1093	1099	482
35°	896	907	938	967	976	560
45°	720	736	775	815	826	556
55°	536	554	600	642	659	481
65°	352	373	429	470	490	350
75°	179	206	264	309	325	192
85°	43	59	77	77	77	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229.1	1229.1	1229.1	1229.1	1229.1
2.5°	1221.1	1224.3	1230.7	1232.3	1232.3
5°	1216.3	1219.5	1225.9	1227.5	1229.1
7.5°	1208.3	1209.9	1217.9	1221.1	1222.7
10°	1195.5	1198.7	1206.7	1211.5	1213.1
12.5°	1177.9	1182.7	1192.3	1198.7	1200.3
15°	1157.1	1163.5	1173.1	1182.7	1184.3
17.5°	1134.7	1141.1	1153.9	1165.1	1168.3
20°	1107.4	1115.5	1129.9	1142.7	1147.5
22.5°	1080.2	1086.6	1104.2	1120.3	1125.1
25°	1046.6	1056.2	1078.6	1093.0	1099.4
27.5°	1011.4	1022.6	1045.0	1064.2	1070.6
30°	974.6	985.8	1009.8	1033.8	1041.8
32.5°	936.2	949.0	977.8	1001.8	1009.8
35°	896.2	907.4	937.8	966.6	976.2
37.5°	854.6	864.2	899.4	929.8	939.4
40°	809.8	822.6	859.4	894.6	904.2
42.5°	765.0	779.4	816.2	854.6	864.2
45°	720.2	736.2	774.6	814.6	825.8
47.5°	677.0	689.8	733.0	771.4	787.4
50°	630.5	643.3	685.0	728.2	744.2
52.5°	582.5	600.1	644.9	686.6	705.8
55°	536.1	553.7	600.1	641.7	659.3
57.5°	492.9	507.3	555.3	598.5	616.1
60°	446.5	459.3	510.5	556.9	572.9
62.5°	396.9	416.1	468.9	512.1	531.3
65°	352.1	372.9	428.9	470.5	489.7
67.5°	310.5	329.7	384.1	428.9	449.7
70°	262.5	288.1	344.1	388.9	408.1
72.5°	224.1	246.5	304.1	348.9	369.7
75°	179.2	206.4	264.1	308.9	324.9
77.5°	142.4	169.6	224.1	259.3	267.3
80°	104.0	131.2	182.4	200.0	204.8
82.5°	70.4	96.0	131.2	136.0	137.6
85°	43.2	59.2	76.8	76.8	76.8
87.5°	20.8	24.0	27.2	25.6	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)