

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: P272025

Luminaire Tested: **22CZ2-29HE-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272025
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: 22CZ2-29HE-S-UNV-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (196) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2560.1 lumens
Efficiency: N/A
Efficacy: 115.3 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

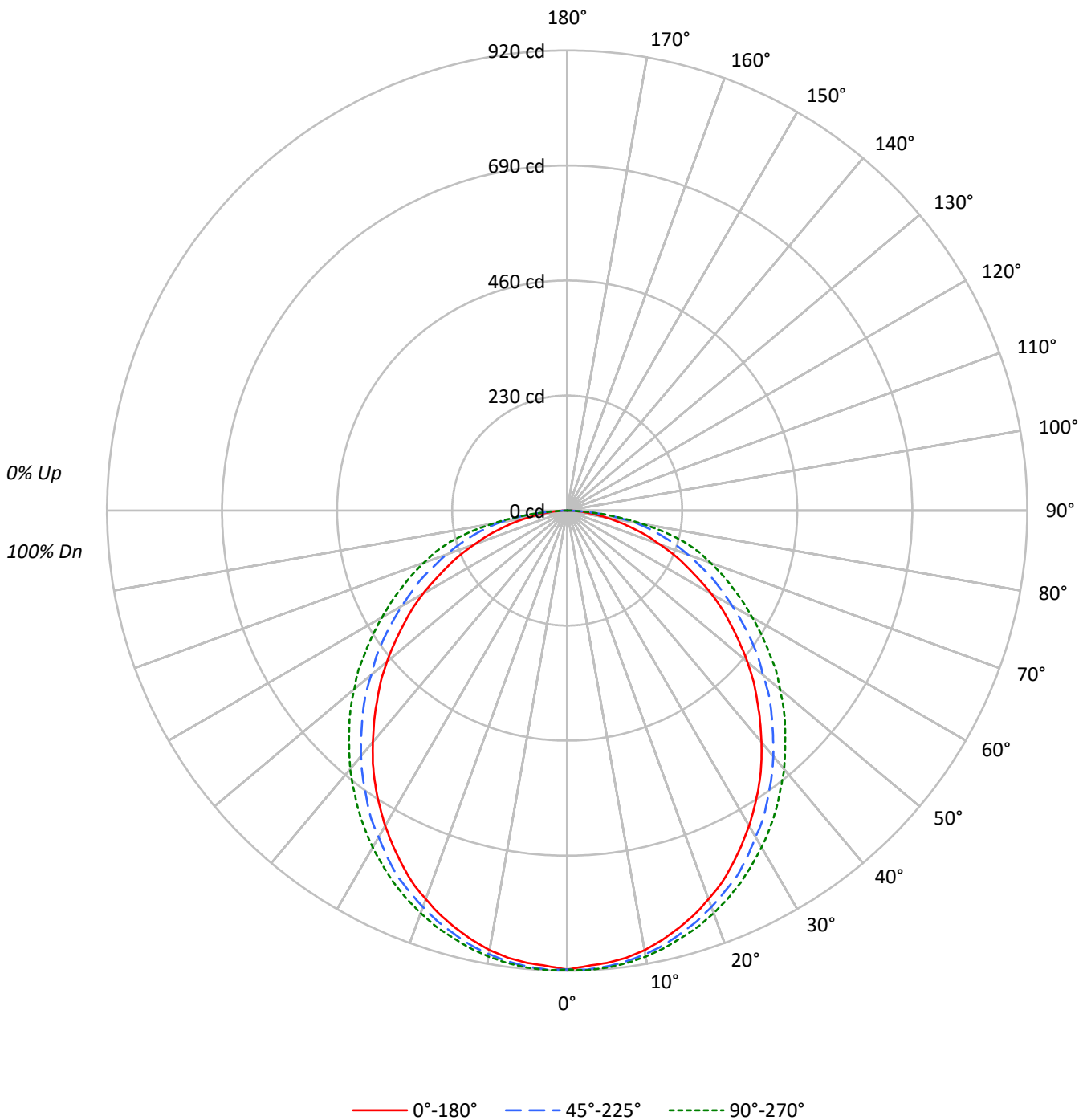
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2469	2469	2469
5°	2452	2472	2478
10°	2438	2461	2474
15°	2406	2439	2462
20°	2367	2415	2452
25°	2320	2390	2436
30°	2260	2342	2416
35°	2197	2300	2394
40°	2123	2253	2371
45°	2046	2200	2346
50°	1970	2140	2325
55°	1878	2101	2309
60°	1794	2051	2301
65°	1673	2038	2327
70°	1541	2020	2397
75°	1391	2049	2521
80°	1203	2111	2369
85°	997	1769	1769



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	3.4
10°-20°	246.9	9.6
20°-30°	369.4	14.4
30°-40°	437.5	17.1
40°-50°	445.8	17.4
50°-60°	399.6	15.6
60°-70°	312.8	12.2
70°-80°	201.7	7.9
80°-90°	59.6	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°	703.0	27.5
0°-40°	1140.5	44.5
0°-60°	1985.9	77.6
0°-90°	2560.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2560.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	917	917	917	917	917	
5°	908	910	915	916	917	86
15°	864	868	876	883	884	243
25°	781	788	805	816	821	360
35°	669	677	700	722	729	418
45°	538	550	578	608	616	415
55°	400	413	448	479	492	359
65°	263	278	320	351	366	261
75°	134	154	197	230	242	143
85°	32	44	57	57	57	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	917.4	917.4	917.4	917.4	917.4
2.5°	911.4	913.8	918.6	919.8	919.8
5°	907.8	910.2	915.0	916.2	917.4
7.5°	901.8	903.0	909.0	911.4	912.6
10°	892.3	894.7	900.6	904.2	905.4
12.5°	879.1	882.7	889.9	894.7	895.9
15°	863.6	868.4	875.6	882.7	883.9
17.5°	846.9	851.7	861.2	869.6	872.0
20°	826.6	832.6	843.3	852.9	856.4
22.5°	806.3	811.1	824.2	836.1	839.7
25°	781.2	788.4	805.1	815.8	820.6
27.5°	754.9	763.3	780.0	794.3	799.1
30°	727.4	735.8	753.7	771.6	777.6
32.5°	698.8	708.3	729.8	747.7	753.7
35°	668.9	677.3	700.0	721.5	728.6
37.5°	637.9	645.0	671.3	694.0	701.2
40°	604.4	614.0	641.4	667.7	674.9
42.5°	571.0	581.7	609.2	637.9	645.0
45°	537.5	549.5	578.1	608.0	616.4
47.5°	505.3	514.8	547.1	575.7	587.7
50°	470.6	480.2	511.2	543.5	555.4
52.5°	434.8	447.9	481.4	512.4	526.8
55°	400.2	413.3	447.9	479.0	492.1
57.5°	367.9	378.7	414.5	446.7	459.9
60°	333.3	342.8	381.0	415.7	427.6
62.5°	296.2	310.6	350.0	382.2	396.6
65°	262.8	278.3	320.1	351.2	365.5
67.5°	231.7	246.1	286.7	320.1	335.6
70°	195.9	215.0	256.8	290.3	304.6
72.5°	167.2	184.0	227.0	260.4	275.9
75°	133.8	154.1	197.1	230.5	242.5
77.5°	106.3	126.6	167.2	193.5	199.5
80°	77.6	97.9	136.2	149.3	152.9
82.5°	52.6	71.7	97.9	101.5	102.7
85°	32.3	44.2	57.3	57.3	57.3
87.5°	15.5	17.9	20.3	19.1	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)