

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: P274736

Luminaire Tested: **22CZ2-20-RDP-UNV-L935-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: P274736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20-RDP-UNV-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1189.0 lumens
Efficiency: N/A
Efficacy: 66.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

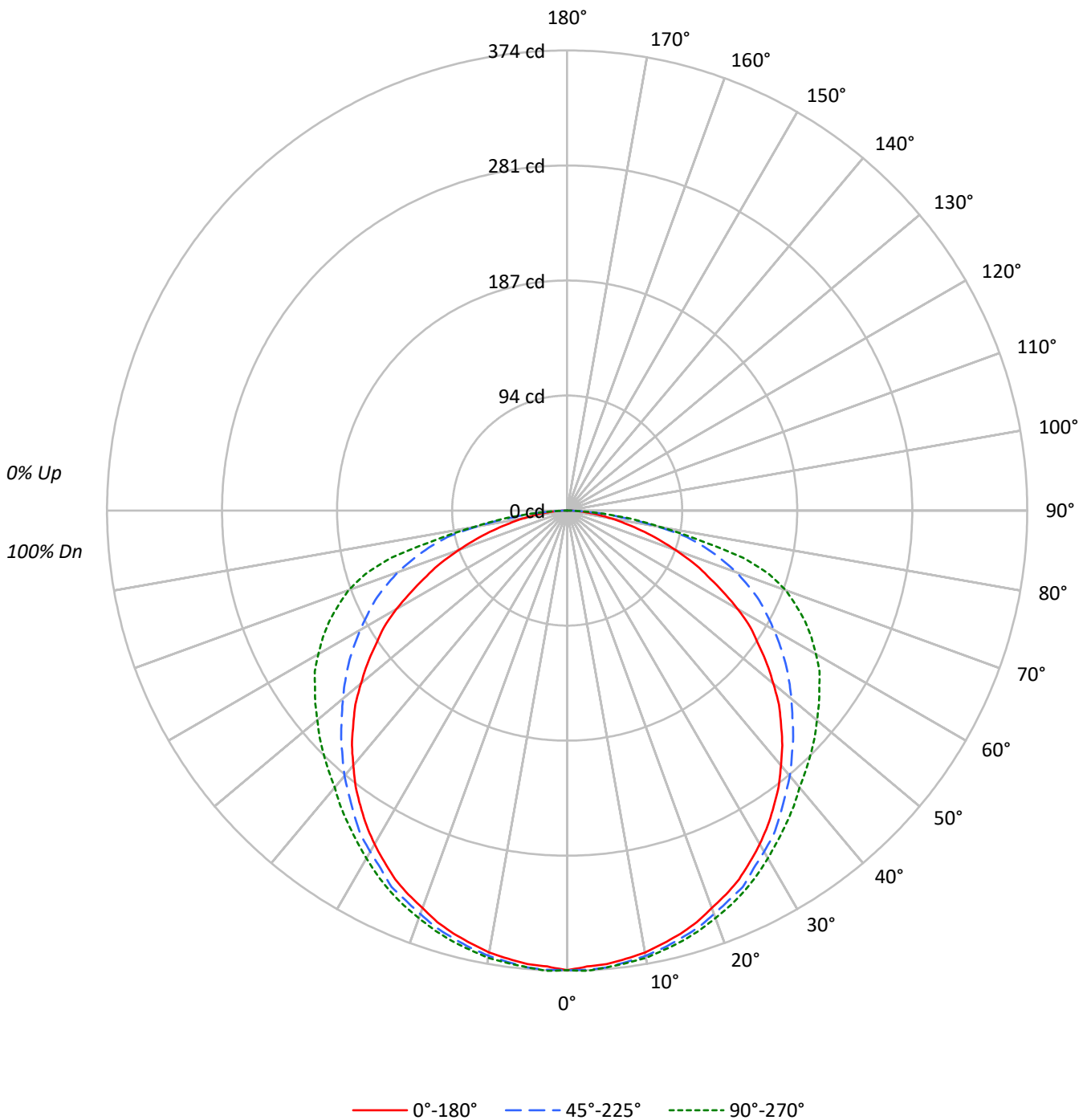
Input Watts (W): 17.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89		92	89	86		88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60		70	64	59		67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50		61	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29		41	34	29		40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1005	1005	1005
5°	999	1006	1006
10°	997	1004	1009
15°	992	1002	1009
20°	984	999	1009
25°	982	1002	1013
30°	973	995	1014
35°	963	991	1020
40°	950	989	1032
45°	935	989	1065
50°	916	996	1109
55°	890	1018	1174
60°	862	1045	1257
65°	802	1097	1359
70°	736	1149	1486
75°	646	1209	1537
80°	556	1151	1206
85°	485	837	917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	3.0
10°-20°	101.4	8.5
20°-30°	154.8	13.0
30°-40°	189.0	15.9
40°-50°	202.1	17.0
50°-60°	195.0	16.4
60°-70°	167.9	14.1
70°-80°	113.6	9.6
80°-90°	30.0	2.5
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°	291.5	24.5
0°-40°	480.5	40.4
0°-60°	877.6	73.8
0°-90°	1189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1189.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	370	371	373	373	373	35
15°	356	357	360	361	362	100
25°	331	332	338	339	341	152
35°	293	296	302	308	310	183
45°	246	250	260	273	280	190
55°	190	196	217	239	250	170
65°	126	138	172	199	213	125
75°	62	82	116	140	148	67
85°	16	22	27	28	30	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	373.5	373.5	373.5	373.5	373.5
2.5°	370.9	371.7	373.5	373.5	374.4
5°	370.0	370.9	372.6	372.6	372.6
7.5°	367.4	368.2	370.0	370.9	370.9
10°	364.7	365.6	367.4	368.2	369.1
12.5°	360.4	361.2	363.9	365.6	365.6
15°	356.0	356.9	359.5	361.2	362.1
17.5°	350.7	352.5	355.1	356.9	357.7
20°	343.7	345.5	349.0	351.6	352.5
22.5°	337.6	339.4	342.9	345.5	347.2
25°	330.6	332.4	337.6	339.4	341.1
27.5°	321.9	323.6	328.0	331.5	334.1
30°	313.1	314.9	320.1	324.5	326.3
32.5°	303.5	306.1	312.3	315.8	318.4
35°	293.0	295.6	301.8	307.9	310.5
37.5°	282.5	285.1	291.3	299.1	302.6
40°	270.3	273.8	281.6	292.1	293.9
42.5°	258.9	263.3	270.3	282.5	286.9
45°	245.8	250.2	259.8	272.9	279.9
47.5°	233.5	237.9	248.4	264.2	272.9
50°	218.7	224.8	237.9	256.3	265.0
52.5°	204.7	209.9	227.4	247.5	258.0
55°	189.8	195.9	216.9	238.8	250.2
57.5°	176.7	181.9	205.5	230.0	243.2
60°	160.1	167.1	194.2	220.4	233.5
62.5°	142.6	153.1	182.8	209.9	223.9
65°	126.0	138.2	172.3	199.4	213.4
67.5°	111.1	124.2	159.2	188.1	201.2
70°	93.6	110.2	146.1	174.1	188.9
72.5°	77.8	96.2	131.2	159.2	172.3
75°	62.1	82.2	116.3	139.9	147.8
77.5°	48.1	67.3	99.7	106.7	107.6
80°	35.9	53.4	74.3	75.2	77.8
82.5°	24.5	37.6	48.1	52.5	53.4
85°	15.7	21.9	27.1	28.0	29.7
87.5°	7.0	7.9	9.6	8.7	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)