

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: P274735

Luminaire Tested: **22CZ2-20-RDP-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: P274735
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-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1160.0 lumens
Efficiency: N/A
Efficacy: 64.8 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

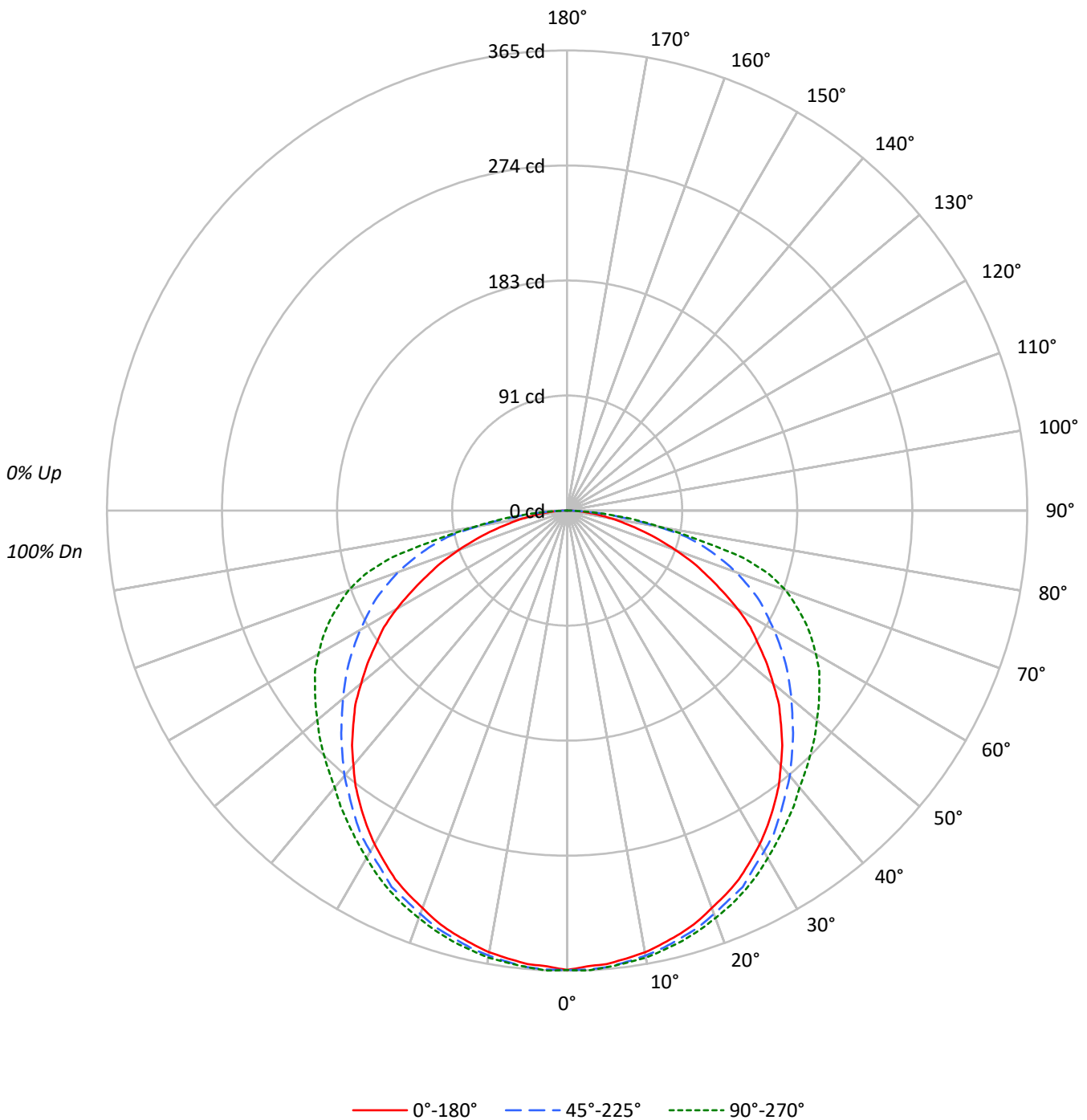
Input Watts (W): 17.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	981	981	981
5°	975	982	982
10°	972	979	984
15°	968	977	984
20°	960	975	985
25°	958	978	988
30°	949	970	989
35°	939	967	995
40°	926	965	1007
45°	913	964	1039
50°	893	972	1083
55°	869	993	1145
60°	841	1019	1226
65°	783	1070	1326
70°	718	1121	1450
75°	630	1180	1499
80°	542	1124	1176
85°	475	818	895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	3.0
10°-20°	99.0	8.5
20°-30°	151.0	13.0
30°-40°	184.4	15.9
40°-50°	197.1	17.0
50°-60°	190.3	16.4
60°-70°	163.8	14.1
70°-80°	110.8	9.6
80°-90°	29.2	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°	284.4	24.5
0°-40°	468.8	40.4
0°-60°	856.2	73.8
0°-90°	1160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1160.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	364	364	364	364	364	
5°	361	362	364	364	364	34
15°	347	348	351	352	353	98
25°	323	324	329	331	333	148
35°	286	288	294	300	303	179
45°	240	244	253	266	273	185
55°	185	191	212	233	244	166
65°	123	135	168	195	208	122
75°	61	80	114	136	144	65
85°	15	21	26	27	29	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	364.4	364.4	364.4	364.4	364.4
2.5°	361.8	362.7	364.4	364.4	365.2
5°	361.0	361.8	363.5	363.5	363.5
7.5°	358.4	359.3	361.0	361.8	361.8
10°	355.8	356.7	358.4	359.3	360.1
12.5°	351.6	352.4	355.0	356.7	356.7
15°	347.3	348.2	350.7	352.4	353.3
17.5°	342.2	343.9	346.5	348.2	349.0
20°	335.4	337.1	340.5	343.0	343.9
22.5°	329.4	331.1	334.5	337.1	338.8
25°	322.6	324.3	329.4	331.1	332.8
27.5°	314.0	315.7	320.0	323.4	326.0
30°	305.5	307.2	312.3	316.6	318.3
32.5°	296.1	298.7	304.6	308.1	310.6
35°	285.9	288.4	294.4	300.4	302.9
37.5°	275.6	278.2	284.2	291.8	295.3
40°	263.7	267.1	274.8	285.0	286.7
42.5°	252.6	256.9	263.7	275.6	279.9
45°	239.8	244.1	253.4	266.2	273.1
47.5°	227.8	232.1	242.3	257.7	266.2
50°	213.3	219.3	232.1	250.0	258.6
52.5°	199.7	204.8	221.9	241.5	251.7
55°	185.2	191.1	211.6	233.0	244.1
57.5°	172.4	177.5	200.5	224.4	237.2
60°	156.2	163.0	189.4	215.0	227.8
62.5°	139.1	149.3	178.3	204.8	218.5
65°	122.9	134.8	168.1	194.6	208.2
67.5°	108.4	121.2	155.3	183.5	196.3
70°	91.3	107.5	142.5	169.8	184.3
72.5°	75.9	93.9	128.0	155.3	168.1
75°	60.6	80.2	113.5	136.5	144.2
77.5°	46.9	65.7	97.3	104.1	105.0
80°	35.0	52.1	72.5	73.4	75.9
82.5°	23.9	36.7	46.9	51.2	52.1
85°	15.4	21.3	26.5	27.3	29.0
87.5°	6.8	7.7	9.4	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)