

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: P271965

Luminaire Tested: **22CZ2-20HE-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: P271965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-UNV-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (112) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1686.4 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

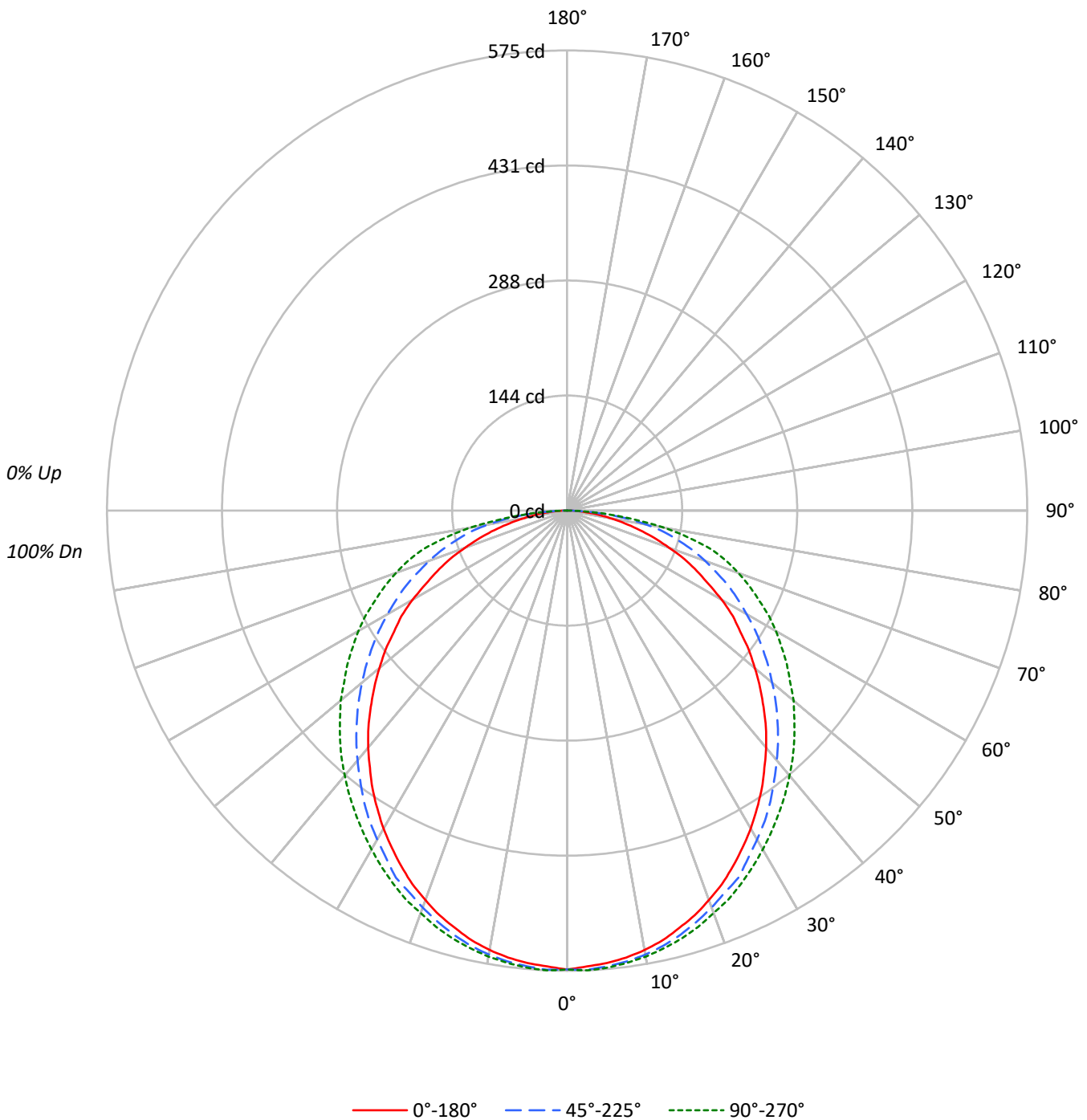
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1543	1543	1543
5°	1533	1544	1549
10°	1524	1539	1546
15°	1505	1528	1542
20°	1483	1511	1533
25°	1456	1503	1528
30°	1426	1475	1519
35°	1393	1456	1516
40°	1358	1431	1519
45°	1320	1415	1528
50°	1282	1400	1546
55°	1238	1394	1573
60°	1201	1393	1621
65°	1141	1416	1680
70°	1065	1443	1789
75°	975	1493	1933
80°	849	1556	1903
85°	744	1383	1513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	3.2
10°-20°	154.5	9.2
20°-30°	231.9	13.7
30°-40°	277.1	16.4
40°-50°	288.1	17.1
50°-60°	267.0	15.8
60°-70°	219.0	13.0
70°-80°	148.1	8.8
80°-90°	46.5	2.8
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°	440.6	26.1
0°-40°	717.6	42.6
0°-60°	1272.8	75.5
0°-90°	1686.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1686.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	573	573	573	573	573	
5°	568	568	572	573	573	54
15°	540	543	548	552	554	152
25°	490	495	506	512	514	226
35°	424	430	443	456	461	265
45°	347	354	372	393	402	268
55°	264	272	297	324	335	237
65°	179	189	222	251	264	177
75°	94	110	144	173	186	99
85°	24	33	45	50	49	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	573.4	573.4	573.4	573.4	573.4
2.5°	570.1	571.7	574.2	575.1	575.1
5°	567.6	568.4	571.7	572.6	573.4
7.5°	563.4	565.1	568.4	569.3	570.1
10°	557.6	559.3	563.4	565.1	565.9
12.5°	550.2	551.8	556.8	559.3	560.1
15°	540.2	542.7	548.5	551.8	553.5
17.5°	530.3	532.7	538.6	543.5	545.2
20°	517.8	523.6	527.8	534.4	535.2
22.5°	505.4	508.7	516.1	522.8	526.1
25°	490.4	494.6	506.2	512.0	514.5
27.5°	474.7	480.5	489.6	498.7	502.0
30°	458.9	463.0	474.7	485.4	488.8
32.5°	441.5	447.3	459.7	470.5	475.5
35°	424.0	429.8	443.1	456.4	461.4
37.5°	405.0	411.6	424.9	440.6	447.3
40°	386.7	391.7	407.4	426.5	432.3
42.5°	367.6	373.4	390.0	410.8	417.4
45°	346.9	353.5	371.8	393.3	401.6
47.5°	326.9	333.6	353.5	375.1	385.0
50°	306.2	314.5	334.4	359.3	369.3
52.5°	286.3	293.8	316.2	341.9	351.0
55°	263.9	272.2	297.1	323.6	335.2
57.5°	245.6	251.4	278.8	306.2	317.8
60°	223.2	230.7	258.9	287.9	301.2
62.5°	199.2	211.6	240.6	270.5	283.8
65°	179.2	189.2	222.4	251.4	263.9
67.5°	158.5	169.3	201.6	232.4	246.5
70°	135.3	149.4	183.4	214.1	227.4
72.5°	114.5	129.5	164.3	194.2	208.3
75°	93.8	109.5	143.6	172.6	185.9
77.5°	73.9	91.3	124.5	146.9	155.2
80°	54.8	71.4	100.4	116.2	122.8
82.5°	38.2	52.3	73.9	82.2	83.8
85°	24.1	33.2	44.8	49.8	49.0
87.5°	10.8	13.3	16.6	18.3	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)