

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: P276468

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-S-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3172.8 lumens
Efficiency: N/A
Efficacy: 157.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

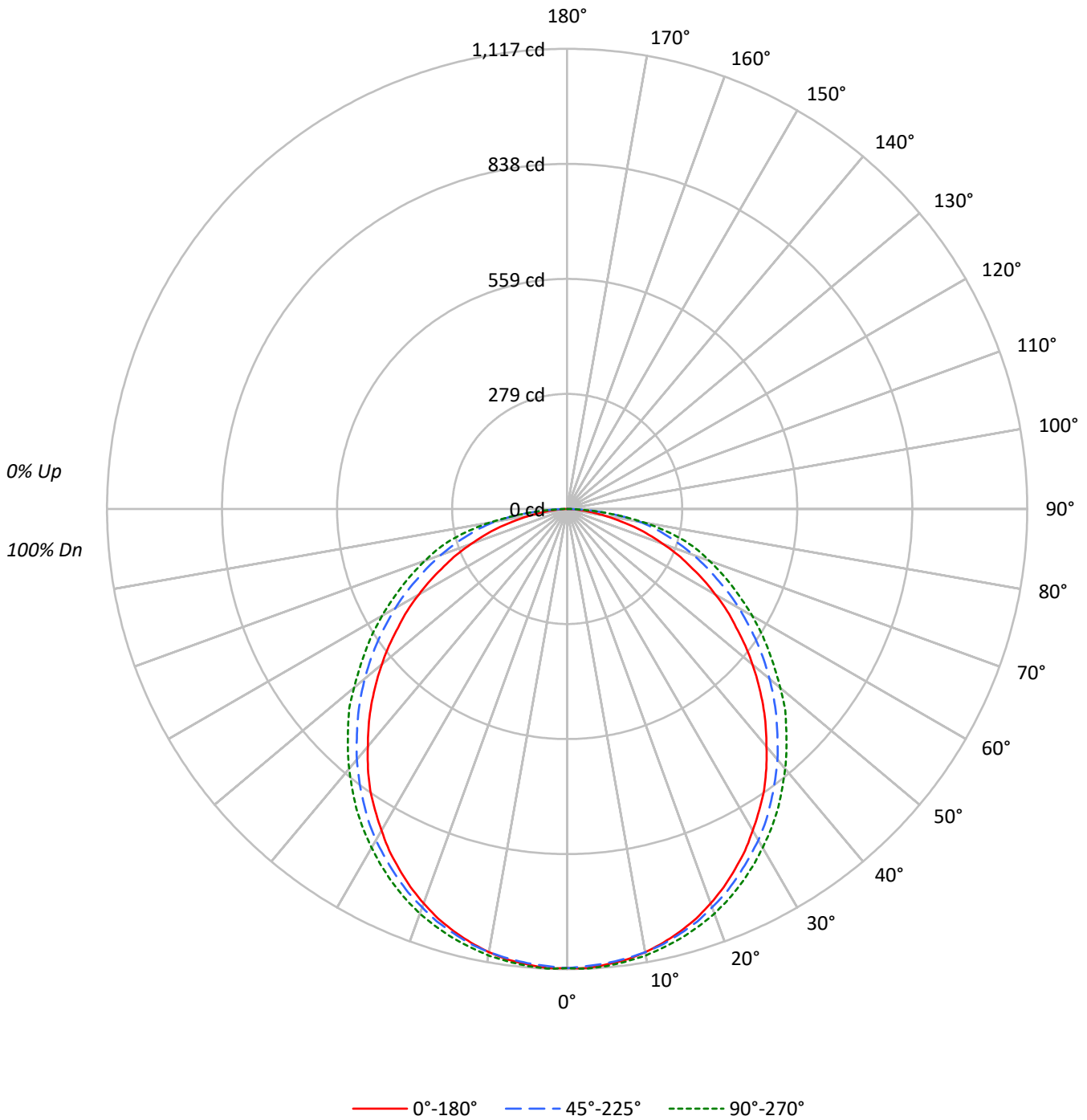
Input Watts (W): 20.181
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1500	1500	1500
5°	1499	1495	1504
10°	1493	1493	1504
15°	1478	1485	1501
20°	1459	1473	1496
25°	1432	1459	1487
30°	1400	1442	1475
35°	1369	1419	1463
40°	1322	1395	1446
45°	1279	1367	1431
50°	1230	1342	1413
55°	1175	1317	1399
60°	1120	1296	1397
65°	1049	1274	1405
70°	971	1281	1443
75°	870	1304	1525
80°	703	1382	1492
85°	530	1213	1183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.5	3.3
10°-20°	301.5	9.5
20°-30°	453.2	14.3
30°-40°	539.9	17.0
40°-50°	552.6	17.4
50°-60°	497.5	15.7
60°-70°	390.7	12.3
70°-80°	253.5	8.0
80°-90°	78.4	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°	860.3	27.1
0°-40°	1400.2	44.1
0°-60°	2450.2	77.2
0°-90°	3172.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3172.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1115	1115	1115	1115	1115	
5°	1110	1112	1107	1113	1114	105
15°	1061	1064	1066	1075	1077	299
25°	964	972	983	999	1002	444
35°	834	844	864	885	891	520
45°	672	688	719	746	752	518
55°	501	523	561	591	597	449
65°	330	355	400	433	441	328
75°	167	200	251	285	293	177
85°	34	64	79	77	77	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1114.6	1114.6	1114.6	1114.6	1114.6
2.5°	1115.6	1115.6	1110.6	1115.6	1116.7
5°	1109.6	1111.6	1106.6	1112.6	1113.6
7.5°	1103.6	1103.6	1100.5	1106.6	1107.6
10°	1092.5	1093.5	1092.5	1099.5	1100.5
12.5°	1078.4	1080.4	1081.4	1088.4	1089.4
15°	1061.2	1064.2	1066.3	1075.3	1077.3
17.5°	1042.1	1045.1	1050.1	1060.2	1062.2
20°	1018.9	1022.9	1029.0	1042.1	1045.1
22.5°	993.7	997.7	1007.8	1019.9	1024.9
25°	964.5	972.5	982.6	998.7	1001.8
27.5°	935.2	942.3	955.4	972.5	976.6
30°	901.0	912.1	928.2	945.3	949.4
32.5°	867.7	878.8	898.0	916.1	921.1
35°	833.5	843.5	863.7	884.9	890.9
37.5°	794.2	807.3	829.4	850.6	856.6
40°	752.8	769.0	794.2	816.3	823.4
42.5°	713.5	730.7	755.9	780.0	788.1
45°	672.2	688.3	718.6	745.8	751.8
47.5°	629.9	648.0	680.3	707.5	717.6
50°	587.6	606.7	641.0	669.2	675.2
52.5°	545.2	565.4	601.7	631.9	634.9
55°	500.9	523.1	561.3	590.6	596.6
57.5°	460.6	479.7	521.0	551.3	558.3
60°	416.2	437.4	481.7	510.0	519.0
62.5°	373.9	396.1	442.4	470.6	478.7
65°	329.6	354.7	400.1	433.4	441.4
67.5°	291.3	315.4	363.8	396.1	404.1
70°	246.9	274.1	325.5	358.8	366.8
72.5°	208.6	236.8	288.2	320.5	332.6
75°	167.3	199.5	250.9	285.2	293.3
77.5°	127.0	164.3	216.7	242.9	242.9
80°	90.7	130.0	178.4	190.5	192.5
82.5°	59.5	97.8	132.0	131.0	131.0
85°	34.3	63.5	78.6	76.6	76.6
87.5°	13.1	26.2	28.2	28.2	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)