

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: P276470

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276470
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-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3189.7 lumens
Efficiency: N/A
Efficacy: 155.9 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

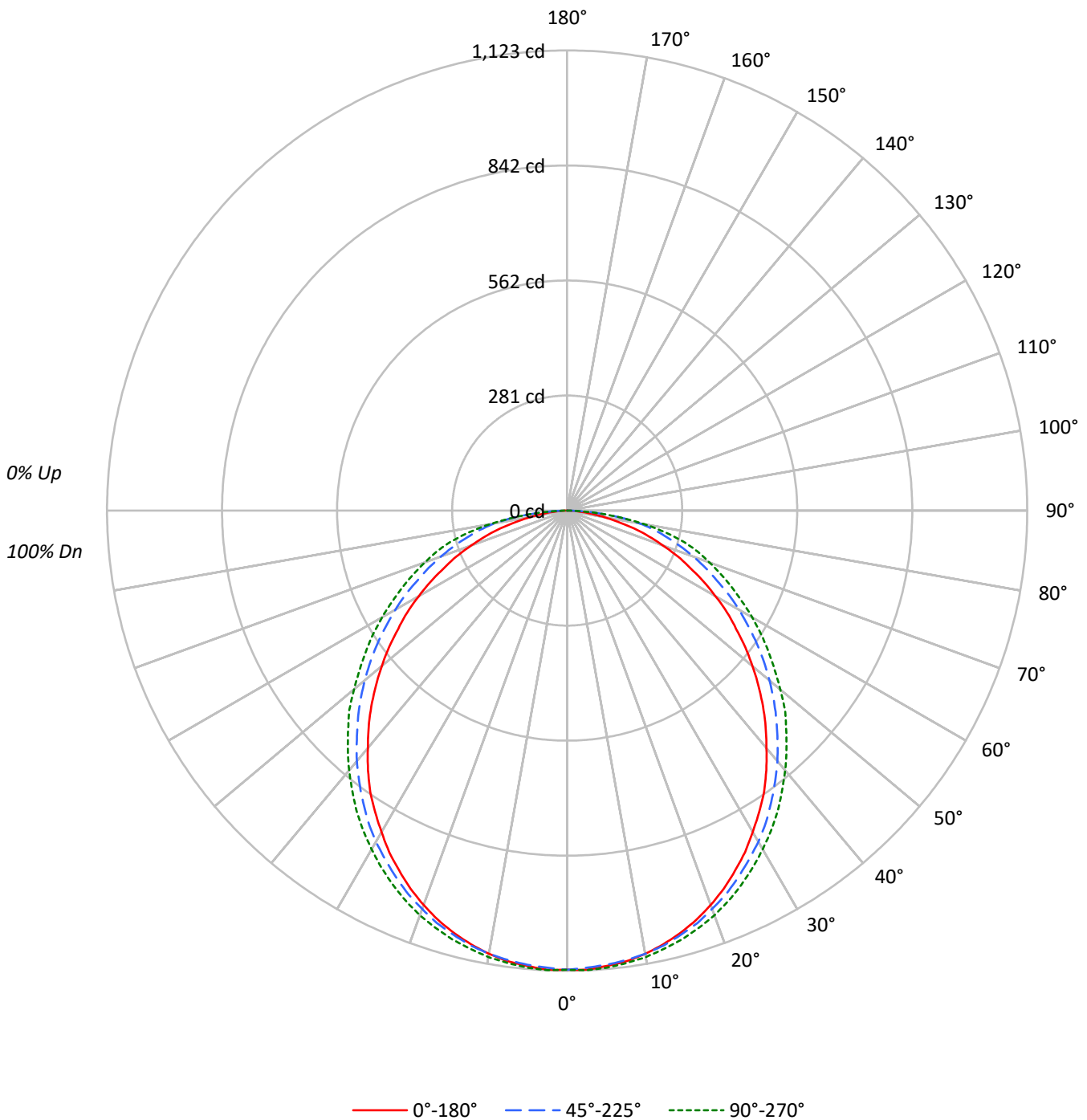
Input Watts (W): 20.46
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1508	1508	1508
5°	1507	1503	1512
10°	1501	1501	1512
15°	1486	1493	1509
20°	1467	1481	1504
25°	1439	1466	1495
30°	1407	1450	1483
35°	1376	1426	1471
40°	1329	1402	1454
45°	1286	1375	1438
50°	1236	1349	1421
55°	1181	1324	1407
60°	1126	1303	1404
65°	1055	1280	1413
70°	976	1288	1451
75°	874	1312	1533
80°	707	1389	1499
85°	531	1220	1189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	3.3
10°-20°	303.1	9.5
20°-30°	455.7	14.3
30°-40°	542.8	17.0
40°-50°	555.5	17.4
50°-60°	500.1	15.7
60°-70°	392.8	12.3
70°-80°	254.9	8.0
80°-90°	78.8	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°	864.9	27.1
0°-40°	1407.6	44.1
0°-60°	2463.2	77.2
0°-90°	3189.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3189.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1121	1121	1121	1121	1121	
5°	1116	1118	1112	1118	1120	106
15°	1067	1070	1072	1081	1083	301
25°	970	978	988	1004	1007	447
35°	838	848	868	890	896	523
45°	676	692	722	750	756	521
55°	504	526	564	594	600	451
65°	331	357	402	436	444	330
75°	168	201	252	287	295	178
85°	34	64	79	77	77	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1120.6	1120.6	1120.6	1120.6	1120.6
2.5°	1121.6	1121.6	1116.5	1121.6	1122.6
5°	1115.5	1117.5	1112.5	1118.5	1119.6
7.5°	1109.4	1109.4	1106.4	1112.5	1113.5
10°	1098.3	1099.3	1098.3	1105.4	1106.4
12.5°	1084.1	1086.1	1087.1	1094.2	1095.2
15°	1066.9	1069.9	1071.9	1081.1	1083.1
17.5°	1047.6	1050.7	1055.7	1065.9	1067.9
20°	1024.3	1028.4	1034.5	1047.6	1050.7
22.5°	999.0	1003.0	1013.2	1025.3	1030.4
25°	969.6	977.7	987.8	1004.1	1007.1
27.5°	940.2	947.3	960.5	977.7	981.8
30°	905.8	916.9	933.1	950.4	954.4
32.5°	872.3	883.5	902.7	921.0	926.0
35°	837.9	848.0	868.3	889.6	895.6
37.5°	798.4	811.6	833.8	855.1	861.2
40°	756.8	773.1	798.4	820.7	827.8
42.5°	717.3	734.6	759.9	784.2	792.3
45°	675.8	692.0	722.4	749.7	755.8
47.5°	633.2	651.5	683.9	711.2	721.4
50°	590.7	609.9	644.4	672.7	678.8
52.5°	548.1	568.4	604.9	635.3	638.3
55°	503.5	525.8	564.3	593.7	599.8
57.5°	463.0	482.3	523.8	554.2	561.3
60°	418.4	439.7	484.3	512.7	521.8
62.5°	375.9	398.2	444.8	473.2	481.3
65°	331.3	356.6	402.2	435.7	443.8
67.5°	292.8	317.1	365.8	398.2	406.3
70°	248.2	275.6	327.3	360.7	368.8
72.5°	209.7	238.1	289.8	322.2	334.3
75°	168.2	200.6	252.3	286.7	294.8
77.5°	127.7	165.1	217.8	244.2	244.2
80°	91.2	130.7	179.3	191.5	193.5
82.5°	59.8	98.3	132.7	131.7	131.7
85°	34.4	63.8	79.0	77.0	77.0
87.5°	13.2	26.3	28.4	28.4	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)