

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: P276465

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276465
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3045.6 lumens
Efficiency: N/A
Efficacy: 153.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

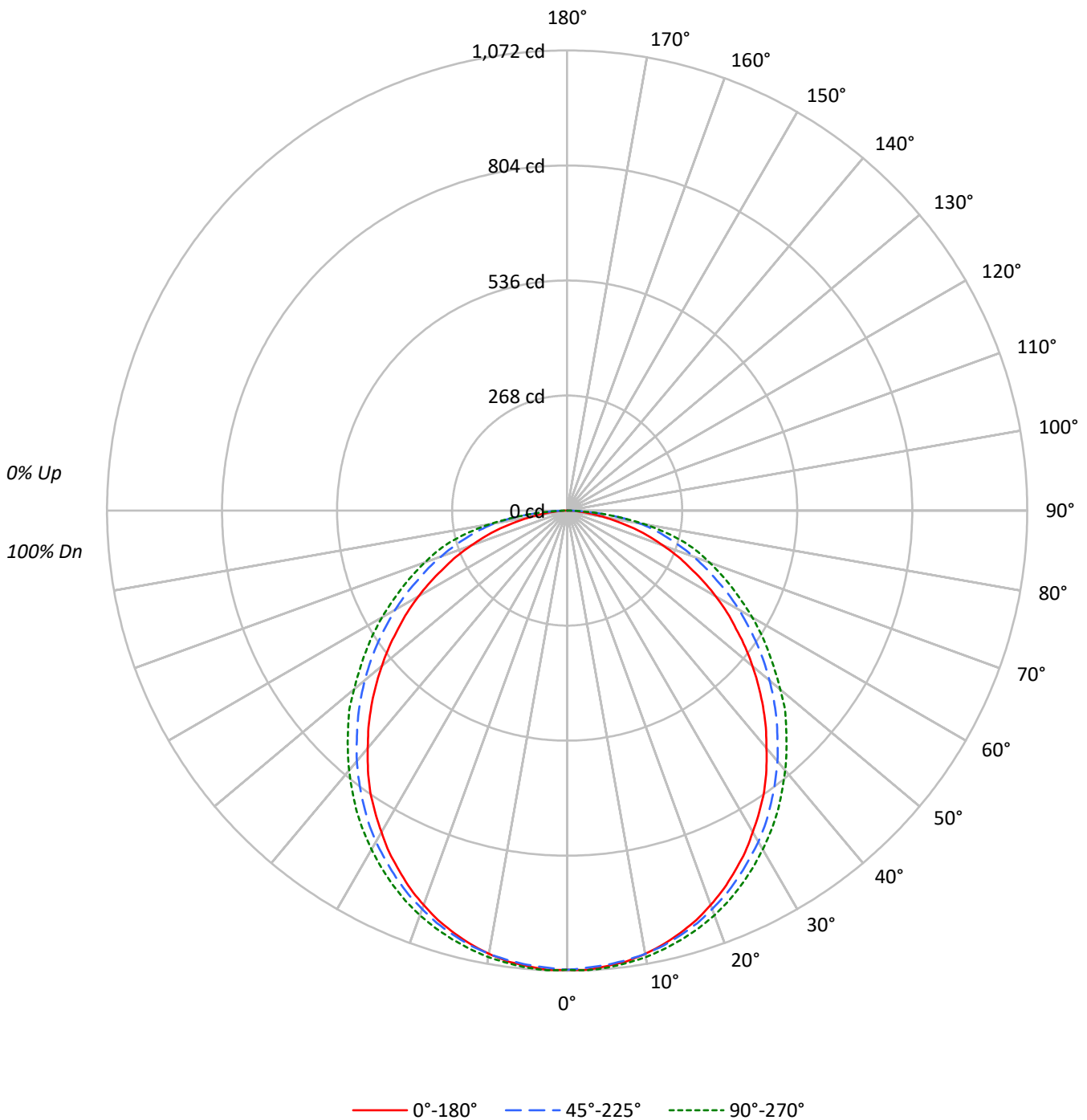
Input Watts (W): 19.809
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1440	1440	1440
5°	1439	1435	1444
10°	1433	1433	1443
15°	1419	1426	1440
20°	1400	1414	1436
25°	1374	1400	1428
30°	1344	1384	1416
35°	1314	1362	1405
40°	1269	1339	1388
45°	1228	1313	1373
50°	1181	1288	1357
55°	1128	1264	1343
60°	1075	1244	1341
65°	1007	1223	1349
70°	932	1229	1385
75°	835	1252	1463
80°	675	1327	1432
85°	508	1166	1135



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	3.3
10°-20°	289.4	9.5
20°-30°	435.1	14.3
30°-40°	518.2	17.0
40°-50°	530.4	17.4
50°-60°	477.5	15.7
60°-70°	375.0	12.3
70°-80°	243.4	8.0
80°-90°	75.3	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°	825.8	27.1
0°-40°	1344.0	44.1
0°-60°	2352.0	77.2
0°-90°	3045.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3045.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1065	1067	1062	1068	1069	101
15°	1019	1022	1024	1032	1034	287
25°	926	934	943	959	962	426
35°	800	810	829	849	855	499
45°	645	661	690	716	722	497
55°	481	502	539	567	573	431
65°	316	340	384	416	424	315
75°	161	192	241	274	282	170
85°	33	61	76	74	74	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1069.9	1069.9	1069.9	1069.9	1069.9
2.5°	1070.9	1070.9	1066.1	1070.9	1071.9
5°	1065.1	1067.0	1062.2	1068.0	1069.0
7.5°	1059.3	1059.3	1056.4	1062.2	1063.2
10°	1048.7	1049.6	1048.7	1055.4	1056.4
12.5°	1035.1	1037.0	1038.0	1044.8	1045.8
15°	1018.7	1021.6	1023.5	1032.2	1034.1
17.5°	1000.3	1003.2	1008.0	1017.7	1019.6
20°	978.0	981.9	987.7	1000.3	1003.2
22.5°	953.9	957.7	967.4	979.0	983.8
25°	925.8	933.5	943.2	958.7	961.6
27.5°	897.7	904.5	917.1	933.5	937.4
30°	864.9	875.5	891.0	907.4	911.3
32.5°	832.9	843.6	861.9	879.4	884.2
35°	800.0	809.7	829.1	849.4	855.2
37.5°	762.3	774.9	796.2	816.5	822.3
40°	722.6	738.1	762.3	783.6	790.4
42.5°	684.9	701.4	725.5	748.8	756.5
45°	645.3	660.7	689.8	715.9	721.7
47.5°	604.6	622.0	653.0	679.1	688.8
50°	564.0	582.4	615.3	642.4	648.2
52.5°	523.4	542.7	577.5	606.6	609.5
55°	480.8	502.1	538.8	566.9	572.7
57.5°	442.1	460.5	500.1	529.2	535.9
60°	399.5	419.8	462.4	489.5	498.2
62.5°	358.9	380.2	424.7	451.8	459.5
65°	316.3	340.5	384.1	416.0	423.7
67.5°	279.6	302.8	349.2	380.2	387.9
70°	237.0	263.1	312.5	344.4	352.1
72.5°	200.3	227.3	276.7	307.6	319.2
75°	160.6	191.5	240.9	273.8	281.5
77.5°	121.9	157.7	208.0	233.1	233.1
80°	87.1	124.8	171.2	182.8	184.8
82.5°	57.1	93.8	126.7	125.8	125.8
85°	32.9	60.9	75.5	73.5	73.5
87.5°	12.6	25.2	27.1	27.1	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)