

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: P275945

Luminaire Tested: **24CZ2-30-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275945  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3041.0 lumens  
Efficiency: N/A  
Efficacy: 133.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

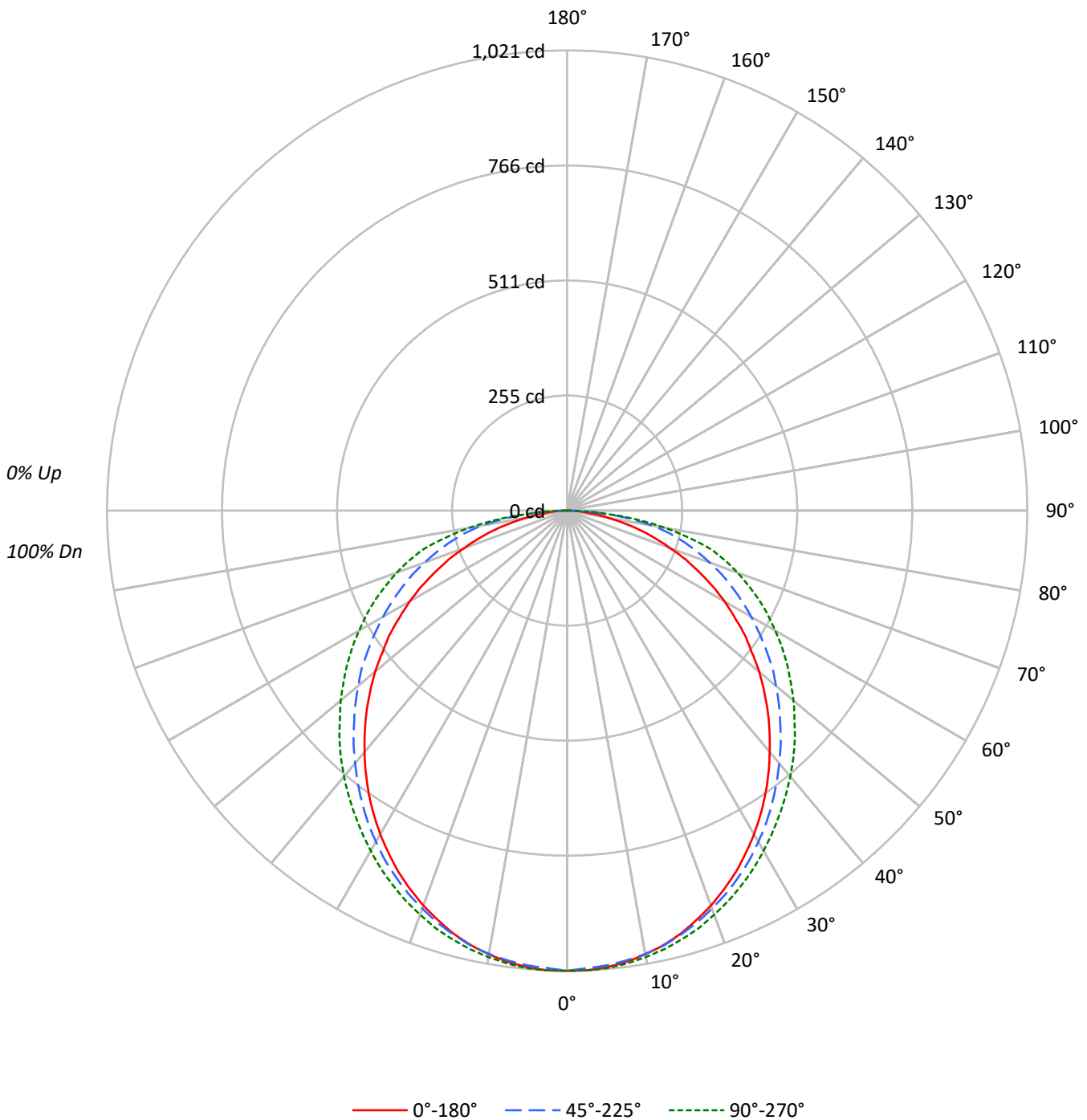
Input Watts (W): 22.785  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1374	1374	1374
5°	1373	1368	1376
10°	1366	1364	1374
15°	1354	1357	1371
20°	1335	1346	1366
25°	1314	1333	1361
30°	1288	1318	1354
35°	1260	1302	1350
40°	1228	1285	1353
45°	1197	1273	1360
50°	1164	1266	1372
55°	1129	1264	1398
60°	1084	1270	1434
65°	1027	1289	1496
70°	954	1321	1581
75°	871	1387	1714
80°	716	1494	1715
85°	548	1379	1473



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.6	3.2
10°-20°	275.7	9.1
20°-30°	414.9	13.6
30°-40°	497.2	16.3
40°-50°	518.1	17.0
50°-60°	482.0	15.9
60°-70°	397.0	13.1
70°-80°	270.4	8.9
80°-90°	89.3	2.9
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°	787.1	25.9
0°-40°	1284.3	42.2
0°-60°	2284.4	75.1
0°-90°	3041.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3041.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1021	1021	1021	1021	1021	
5°	1017	1017	1013	1018	1019	97
15°	972	973	974	984	984	274
25°	885	889	898	913	916	407
35°	767	776	793	814	822	480
45°	629	642	669	702	714	485
55°	481	497	539	582	596	429
65°	323	350	405	453	470	320
75°	168	205	267	315	330	177
85°	36	69	89	95	95	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1021.0	1021.0	1021.0	1021.0	1021.0
2.5°	1021.0	1021.0	1015.9	1021.0	1021.0
5°	1016.9	1016.9	1012.9	1018.0	1019.0
7.5°	1009.8	1010.9	1006.8	1012.9	1013.9
10°	999.7	1000.7	998.7	1004.8	1005.8
12.5°	987.5	988.5	988.5	995.6	996.6
15°	972.3	973.3	974.3	983.5	984.5
17.5°	953.0	956.1	958.1	969.2	971.3
20°	932.7	935.8	939.8	952.0	954.0
22.5°	909.4	913.4	920.5	933.7	936.8
25°	885.0	889.1	898.2	913.4	916.5
27.5°	857.6	863.7	874.9	891.1	895.2
30°	829.2	835.3	848.5	865.7	871.8
32.5°	798.7	806.9	822.1	841.4	847.5
35°	767.3	776.4	792.6	814.0	822.1
37.5°	733.8	743.9	763.2	786.6	796.7
40°	699.3	711.5	731.8	759.2	770.3
42.5°	664.8	675.9	701.3	730.7	742.9
45°	629.2	642.4	668.8	702.3	714.5
47.5°	592.7	605.9	637.4	672.9	684.1
50°	556.2	569.4	604.9	642.4	655.6
52.5°	516.6	533.8	574.4	612.0	625.2
55°	481.1	497.3	538.9	581.5	595.8
57.5°	440.5	459.8	505.4	550.1	565.3
60°	402.9	423.2	471.9	517.6	532.8
62.5°	364.4	386.7	438.4	485.1	502.4
65°	322.7	350.1	405.0	452.7	469.9
67.5°	285.2	313.6	371.5	420.2	435.4
70°	242.6	277.1	335.9	384.7	401.9
72.5°	206.0	240.5	302.4	350.1	367.4
75°	167.5	205.0	266.9	314.6	329.8
77.5°	128.9	170.5	232.4	269.0	274.0
80°	92.4	136.0	192.8	214.1	221.3
82.5°	65.0	104.5	142.1	156.3	160.4
85°	35.5	69.0	89.3	95.4	95.4
87.5°	15.2	29.4	35.5	36.5	37.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)