

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: P261261

Luminaire Tested: **24CZ-LD5-30-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261261  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30-S-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2838.0 lumens  
Efficiency: N/A  
Efficacy: 141.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

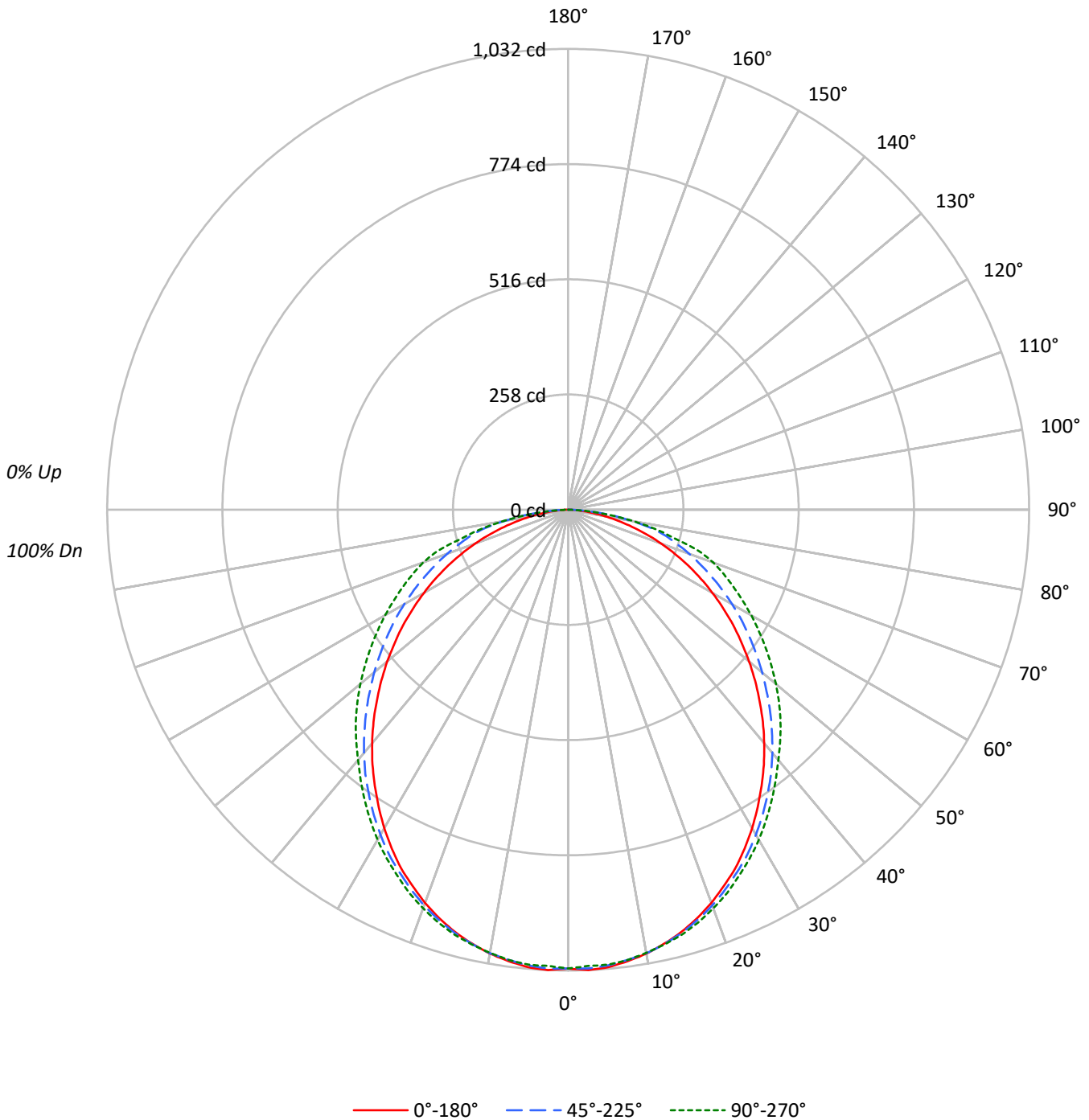
Input Watts (W): 19.995  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1382	1382	1382
5°	1389	1384	1381
10°	1379	1378	1377
15°	1364	1367	1372
20°	1341	1351	1360
25°	1315	1329	1343
30°	1279	1306	1326
35°	1239	1278	1305
40°	1199	1249	1285
45°	1153	1216	1279
50°	1107	1186	1271
55°	1059	1161	1267
60°	1004	1141	1273
65°	944	1127	1299
70°	869	1133	1360
75°	771	1173	1266
80°	644	1112	1141
85°	482	889	817



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.1	3.4
10°-20°	276.3	9.7
20°-30°	411.7	14.5
30°-40°	484.6	17.1
40°-50°	492.5	17.4
50°-60°	442.8	15.6
60°-70°	349.8	12.3
70°-80°	221.9	7.8
80°-90°	61.3	2.2
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°	785.1	27.7
0°-40°	1269.7	44.7
0°-60°	2205.0	77.7
0°-90°	2838.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2838.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1027	1027	1027	1027	1027	
5°	1028	1020	1025	1023	1023	98
15°	979	974	981	984	985	276
25°	886	885	895	901	905	407
35°	754	759	778	787	794	472
45°	606	615	639	658	672	468
55°	451	463	495	527	540	403
65°	296	312	354	393	408	294
75°	148	174	226	246	244	158
85°	31	54	58	53	53	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1027.4	1027.4	1027.4	1027.4	1027.4
2.5°	1032.1	1024.6	1028.4	1026.5	1022.7
5°	1028.4	1019.9	1024.6	1022.7	1022.7
7.5°	1019.9	1013.2	1017.0	1016.1	1017.0
10°	1009.5	1002.9	1008.5	1008.5	1007.6
12.5°	995.3	989.6	996.2	996.2	997.2
15°	979.2	974.5	981.1	984.0	984.9
17.5°	959.4	954.7	963.2	966.0	968.9
20°	936.8	934.9	943.4	946.2	950.0
22.5°	911.3	911.3	919.8	923.5	929.2
25°	885.8	884.8	895.2	900.9	904.6
27.5°	855.5	856.5	869.7	875.4	880.1
30°	823.4	825.3	840.4	847.0	853.7
32.5°	789.4	793.2	810.2	817.8	824.4
35°	754.5	759.2	778.1	786.6	794.2
37.5°	719.6	726.2	746.0	754.5	763.0
40°	682.7	688.4	711.1	721.5	731.8
42.5°	645.0	652.5	675.2	690.3	702.6
45°	606.2	614.7	639.3	658.2	672.3
47.5°	567.5	578.9	602.5	628.0	640.2
50°	528.8	540.1	566.6	594.9	607.2
52.5°	489.2	500.5	530.7	560.0	573.2
55°	451.4	462.7	494.8	526.9	540.1
57.5°	411.7	424.0	459.9	492.9	506.1
60°	373.0	385.3	424.0	458.9	473.1
62.5°	335.2	348.5	389.1	425.9	440.0
65°	296.5	311.6	354.1	392.8	407.9
67.5°	258.7	275.7	320.1	360.7	376.8
70°	221.0	240.8	288.0	329.6	345.6
72.5°	184.1	205.9	255.9	297.5	306.0
75°	148.3	173.8	225.7	245.5	243.6
77.5°	114.3	142.6	191.7	195.5	201.1
80°	83.1	114.3	143.5	151.1	147.3
82.5°	54.8	85.9	102.9	99.2	98.2
85°	31.2	53.8	57.6	52.9	52.9
87.5°	13.2	21.7	18.9	14.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)