Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P219213

Luminaire Tested: **24GR-LD5-90-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Report Generated By E9911574 / USPTCWHP6081592

Test Information

Test Method:	LM-79-08
Report Number:	P219213
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab:	INNOVATION CENTER-P3
Issue Date:	3/12/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	24GR-LD5-90-A19/156-UNV-L930-CD1-U
Description:	METALUX GR 2X4 LED TROFFER WITH A19/156 LENS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7133.2 lumens
Efficiency:	N/A
Efficacy:	103.2 lumens/watt
Spacing Criteria (0/90/45):	1.21 / 1.2 / 1.26
Luminous Opening:	Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type:	Direct
Input Watts (W):	69.117
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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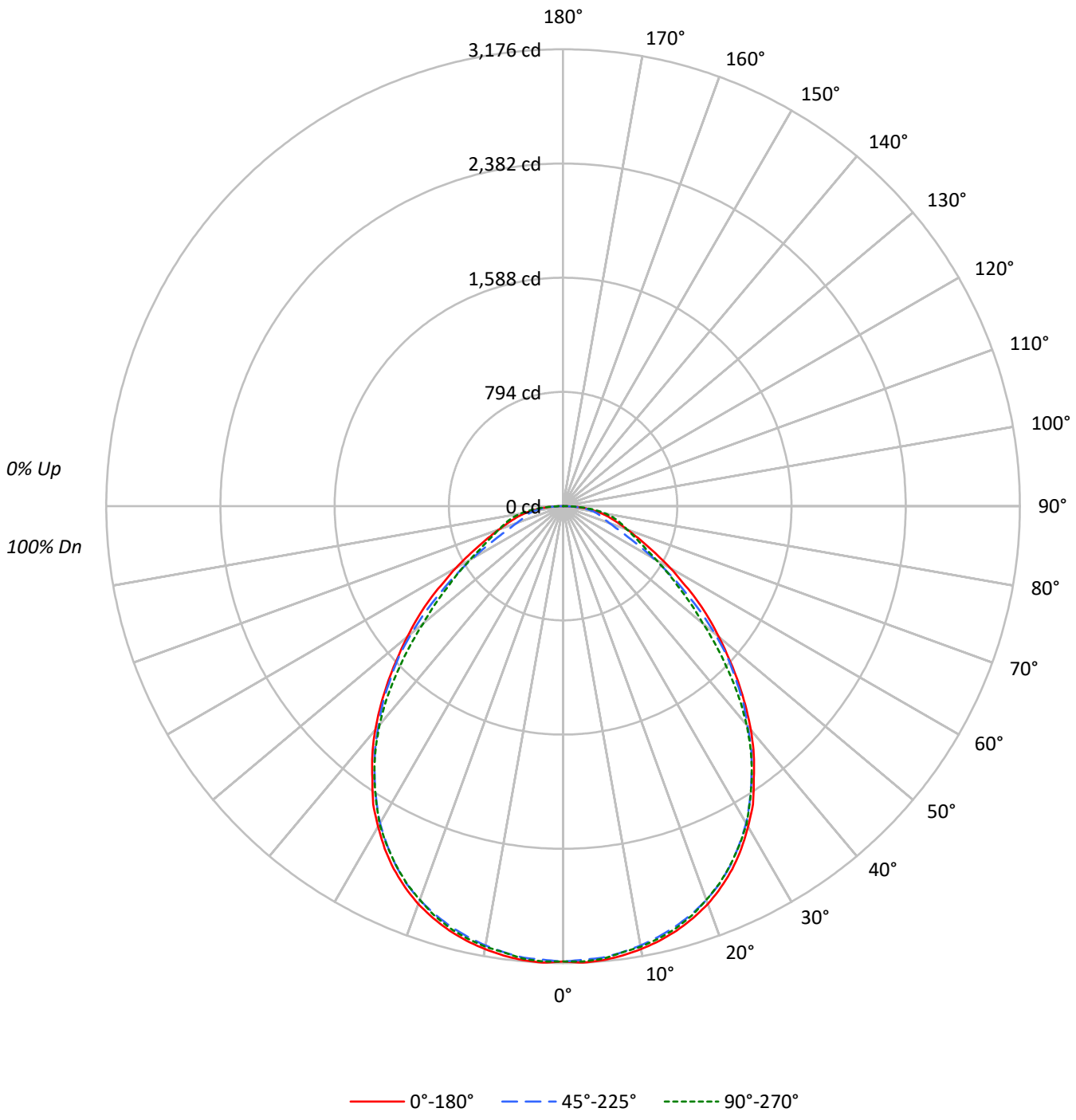
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4848	4848	4848
5°	4871	4844	4856
10°	4862	4823	4837
15°	4844	4795	4816
20°	4798	4749	4747
25°	4704	4654	4650
30°	4549	4502	4512
35°	4321	4271	4277
40°	4063	3992	3968
45°	3724	3673	3528
50°	3366	3274	3028
55°	3022	2751	2610
60°	2647	2214	2295
65°	2309	1741	2113
70°	2112	1520	2112
75°	2113	1617	2328
80°	2294	1905	2654
85°	2518	2149	2847

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Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.7	4.2
10°-20°	855.3	12.0
20°-30°	1268.3	17.8
30°-40°	1430.7	20.1
40°-50°	1295.8	18.2
50°-60°	934.9	13.1
60°-70°	558.2	7.8
70°-80°	345.0	4.8
80°-90°	145.3	2.0
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°	2423.3	34.0
0°-40°	3854.0	54.0
0°-60°	6084.6	85.3
0°-90°	7133.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7133.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3165	3165	3165	3165	3165	
5°	3168	3164	3151	3147	3158	301
15°	3055	3036	3024	3025	3037	861
25°	2784	2768	2754	2744	2752	1279
35°	2311	2308	2284	2286	2288	1446
45°	1719	1708	1696	1654	1629	1325
55°	1132	1096	1030	980	977	1010
65°	637	561	480	546	583	641
75°	357	310	273	340	393	381
85°	143	126	122	160	162	150
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*3165.0*	3165.0	3165.0	3165.0	3165.0
2.5°	*3175.9*	*3167.1*	*3156.1*	*3162.7*	*3168.2*
5°	*3168.2*	3163.8	3150.6	3147.2	3158.3
7.5°	*3151.7*	3140.7	3128.5	3134.0	3129.6
10°	*3126.3*	3116.4	3101.0	3102.1	3109.8
12.5°	*3095.5*	3083.4	3066.8	3071.2	3077.9
15°	*3054.7*	3036.0	3023.8	3025.0	3037.1
17.5°	*3002.9*	2988.6	2973.2	2976.4	2982.0
20°	*2943.4*	2935.7	2913.6	2907.1	2912.6
22.5°	*2868.4*	2854.2	2842.0	2838.8	2839.8
25°	*2783.7*	2768.2	2753.9	2744.0	2751.7
27.5°	*2684.4*	2671.2	2652.5	2649.2	2655.8
30°	*2572.0*	2562.1	2545.6	2541.2	2551.1
32.5°	*2457.5*	2440.9	2417.8	2417.8	2420.0
35°	*2310.8*	2307.6	2284.4	2285.5	2287.7
37.5°	*2178.7*	2163.2	2150.0	2136.8	2143.4
40°	*2032.0*	2014.4	1996.8	1988.0	1984.6
42.5°	*1874.5*	1861.2	1853.5	1821.5	1813.8
45°	*1719.1*	1708.1	1695.9	1654.1	1628.8
47.5°	*1560.4*	1558.2	1548.3	1474.4	1449.1
50°	*1412.8*	1409.4	1374.2	1295.9	1270.6
52.5°	*1272.8*	1250.7	1204.5	1127.3	1122.9
55°	*1131.8*	1096.5	1030.3	979.7	977.4
57.5°	*982.9*	941.1	873.9	846.3	860.7
60°	*864.0*	800.1	722.9	726.2	749.3
62.5°	*740.5*	668.9	592.9	625.9	653.5
65°	*637.0*	560.9	480.4	545.5	582.9
67.5°	*546.6*	476.1	398.9	486.0	522.3
70°	*471.7*	414.3	339.4	430.9	471.7
72.5°	*412.1*	359.2	300.9	386.8	434.2
75°	*357.0*	309.6	273.3	340.5	393.4
77.5°	*309.6*	263.4	246.8	300.9	352.6
80°	*260.1*	218.2	216.0	262.2	300.9
82.5°	*202.8*	174.1	174.1	219.3	242.5
85°	*143.3*	125.6	122.3	159.8	162.0
87.5°	*73.8*	70.5	63.9	83.7	83.7
90°	*0.0*	0.0	0.0	0.0	0.0

(END OF REPORT)