

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: P219032

Luminaire Tested: **24GR-LD5-85-F1-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35585)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-F1-UNV-L930-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH F1 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6905.9 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

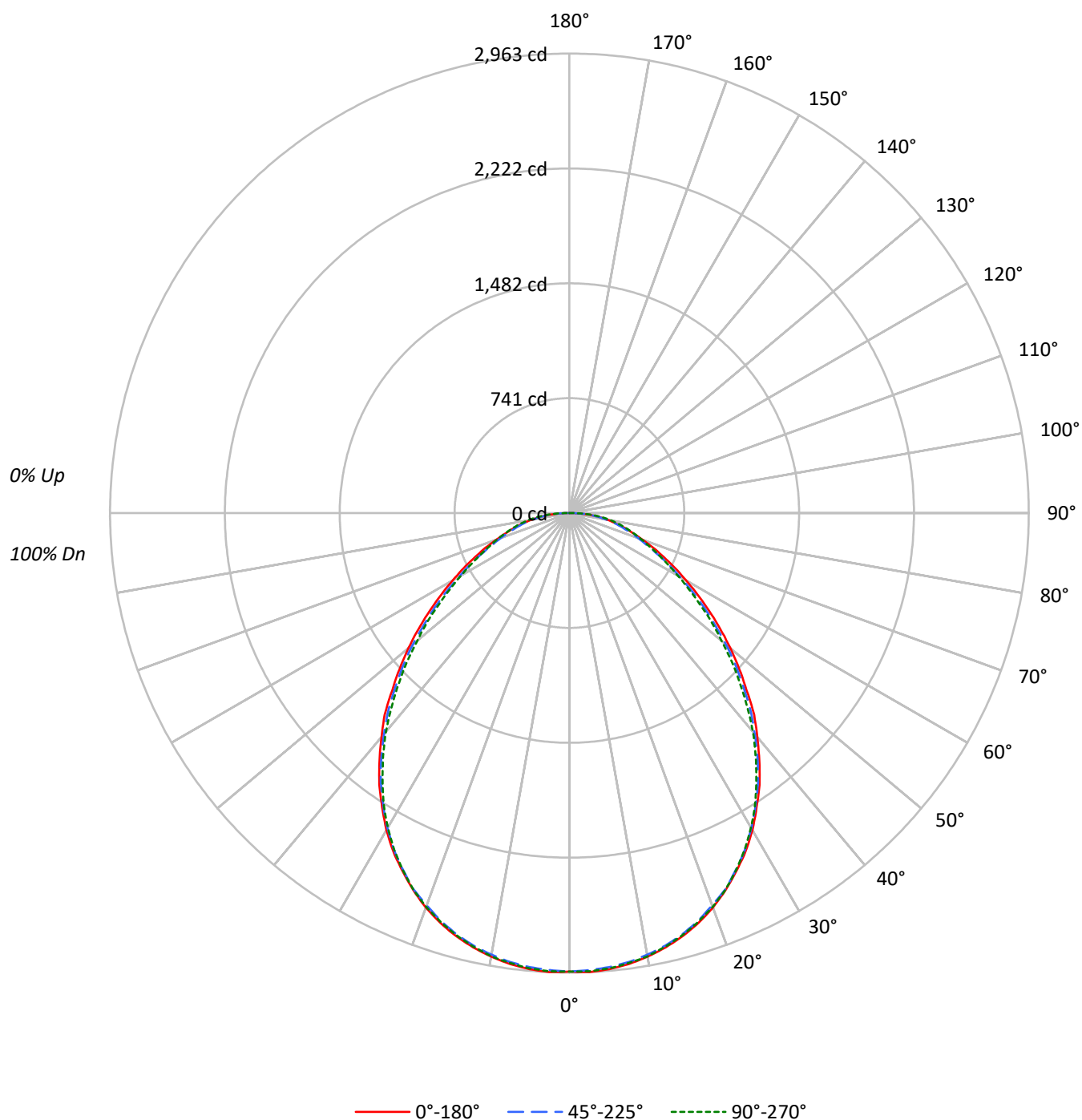
Input Watts (W): 70.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P219032

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P219032

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L930-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85		
2	100	92	86	80	98	90	85	80	87	82	78	84	80	76	81	77	74	72		
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62		
4	85	73	65	58	82	72	64	58	69	63	57	67	61	57	65	60	56	54		
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47		
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42		
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37		
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33		
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30		
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4529	4529	4529
5°	4539	4518	4531
10°	4517	4497	4514
15°	4479	4459	4469
20°	4413	4387	4405
25°	4306	4291	4295
30°	4175	4150	4143
35°	3998	3966	3930
40°	3768	3719	3683
45°	3501	3439	3374
50°	3227	3143	3050
55°	2934	2832	2744
60°	2658	2518	2472
65°	2431	2269	2284
70°	2236	2107	2208
75°	2174	2061	2250
80°	2179	2123	2395
85°	2395	2263	2638



TEST NUMBER: P219032

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.3	4.0
10°-20°	792.8	11.5
20°-30°	1168.3	16.9
30°-40°	1321.2	19.1
40°-50°	1225.5	17.7
50°-60°	952.1	13.8
60°-70°	638.4	9.2
70°-80°	382.6	5.5
80°-90°	145.6	2.1
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°	2240.5	32.4
0°-40°	3561.7	51.6
0°-60°	5739.2	83.1
0°-90°	6905.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6905.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2957	2957	2957	2957	2957	
5°	2952	2944	2939	2937	2947	280
15°	2825	2813	2812	2807	2818	796
25°	2548	2545	2539	2535	2542	1173
35°	2138	2130	2121	2108	2102	1332
45°	1616	1610	1588	1563	1558	1250
55°	1099	1086	1060	1034	1028	986
65°	671	650	626	624	630	670
75°	367	355	348	365	380	388
85°	136	128	129	151	150	143
90°	0	0	0	0	0	



TEST NUMBER: P219032

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2956.8	2956.8	2956.8	2956.8	2956.8
2.5°	2963.2	2953.6	2949.3	2947.2	2956.8
5°	2952.5	2944.0	2938.7	2936.6	2947.2
7.5°	2933.4	2923.8	2920.6	2916.3	2927.0
10°	2904.6	2896.1	2891.8	2888.6	2902.5
12.5°	2868.4	2861.0	2856.7	2854.6	2863.1
15°	2824.7	2813.0	2811.9	2806.7	2818.3
17.5°	2770.5	2759.8	2757.7	2755.5	2763.0
20°	2707.6	2697.0	2691.6	2690.6	2702.3
22.5°	2632.0	2624.6	2626.7	2620.3	2628.8
25°	2547.9	2544.7	2539.4	2535.1	2541.5
27.5°	2460.7	2450.0	2450.0	2441.5	2447.9
30°	2360.5	2353.1	2346.7	2338.1	2342.4
32.5°	2247.7	2244.5	2234.9	2226.4	2228.5
35°	2138.0	2129.5	2120.9	2108.2	2101.8
37.5°	2012.4	2003.8	1993.2	1975.1	1973.0
40°	1884.6	1877.1	1860.1	1840.9	1842.0
42.5°	1763.2	1751.5	1730.2	1704.6	1699.3
45°	1616.3	1609.9	1587.5	1563.0	1557.8
47.5°	1485.3	1481.1	1453.4	1427.8	1421.4
50°	1354.3	1342.7	1319.2	1293.6	1279.9
52.5°	1225.5	1210.6	1180.8	1163.7	1157.3
55°	1098.8	1086.0	1060.5	1033.9	1027.5
57.5°	980.6	966.8	935.9	916.8	913.6
60°	867.7	855.0	822.0	808.1	807.0
62.5°	767.7	746.4	724.1	714.5	715.5
65°	670.8	649.5	626.1	623.9	630.3
67.5°	585.6	563.3	539.8	548.3	554.7
70°	499.4	483.4	470.6	484.5	493.0
72.5°	425.9	416.3	404.6	423.8	434.4
75°	367.4	354.6	348.2	365.2	380.2
77.5°	304.5	293.9	293.9	312.0	327.9
80°	247.0	239.6	240.7	261.9	271.5
82.5°	193.8	183.1	184.2	210.8	217.2
85°	136.3	127.8	128.8	151.2	150.1
87.5°	71.3	68.1	71.3	87.3	83.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)