

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: P475641

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475641
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-A19/156-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2813.4 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

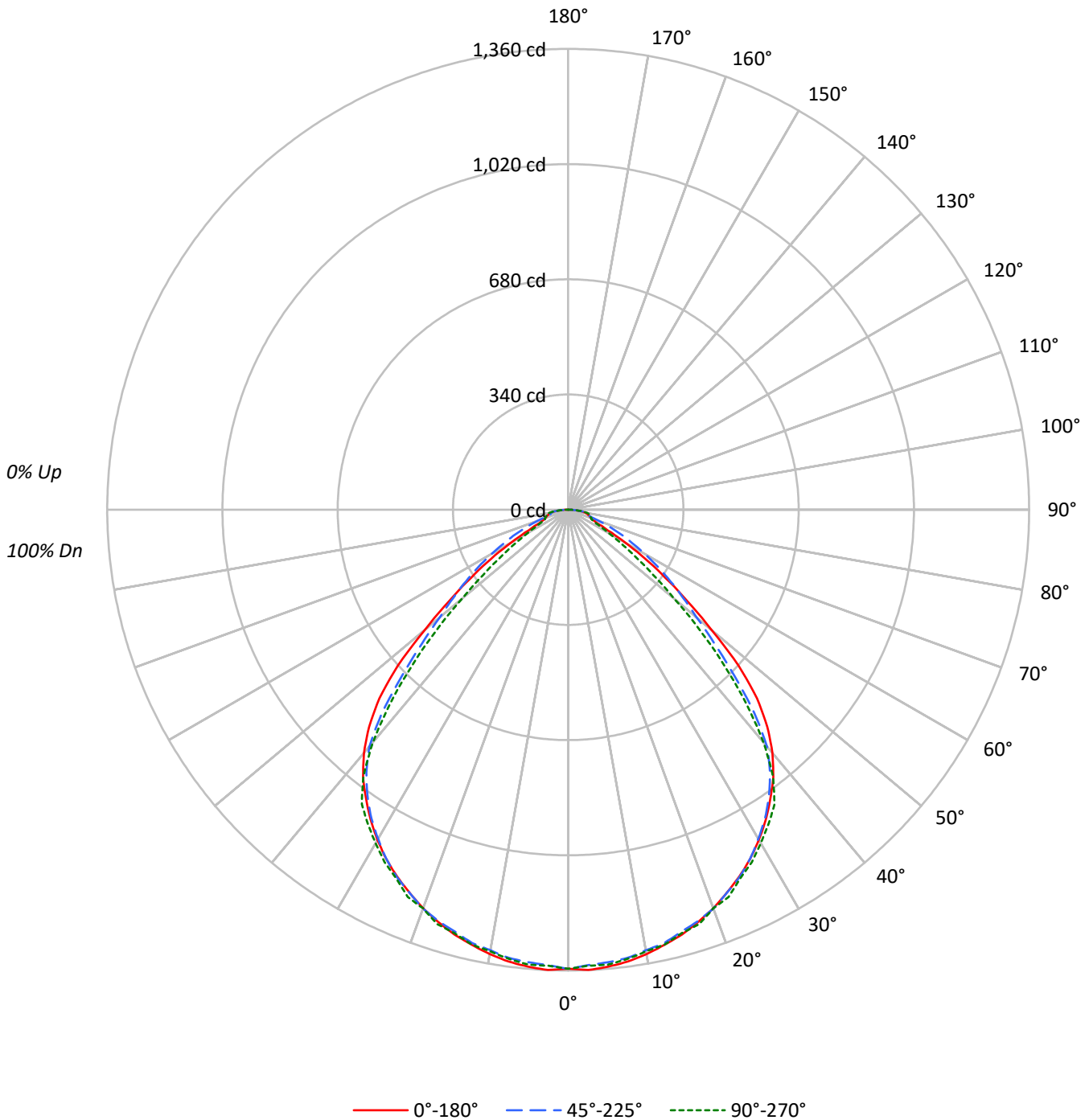
Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1823	1823	1823
5°	1829	1811	1820
10°	1820	1804	1808
15°	1808	1796	1802
20°	1792	1793	1793
25°	1773	1776	1782
30°	1748	1743	1766
35°	1709	1696	1743
40°	1647	1603	1575
45°	1499	1319	1244
50°	1156	1034	855
55°	822	863	566
60°	520	697	369
65°	302	548	270
70°	279	378	286
75°	322	287	341
80°	401	397	450
85°	438	465	482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.7	4.5
10°-20°	365.2	13.0
20°-30°	551.0	19.6
30°-40°	646.7	23.0
40°-50°	544.5	19.4
50°-60°	309.3	11.0
60°-70°	154.4	5.5
70°-80°	81.0	2.9
80°-90°	33.7	1.2
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°	1043.8	37.1
0°-40°	1690.6	60.1
0°-60°	2544.3	90.4
0°-90°	2813.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2813.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1355	1355	1355	1355	1355	
5°	1354	1344	1341	1343	1348	129
15°	1298	1295	1290	1293	1294	366
25°	1194	1195	1196	1200	1200	550
35°	1040	1034	1032	1050	1061	650
45°	788	756	693	681	654	593
55°	350	375	368	317	241	319
65°	95	196	172	146	85	108
75°	62	95	55	83	66	66
85°	28	34	30	38	31	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1354.8	1354.8	1354.8	1354.8	1354.8
2.5°	1359.6	1353.0	1345.6	1343.6	1347.0
5°	1353.9	1344.2	1340.7	1343.0	1347.6
7.5°	1345.0	1335.0	1334.4	1330.4	1337.3
10°	1331.9	1325.3	1320.4	1322.7	1323.5
12.5°	1315.2	1313.2	1309.5	1306.4	1314.1
15°	1297.8	1294.6	1289.5	1292.9	1293.8
17.5°	1275.4	1273.7	1272.9	1275.4	1282.9
20°	1251.7	1251.7	1252.5	1253.1	1251.9
22.5°	1223.3	1222.4	1223.6	1225.9	1236.8
25°	1194.4	1194.9	1196.4	1199.5	1200.4
27.5°	1162.3	1162.6	1162.0	1165.2	1172.6
30°	1125.3	1124.2	1121.9	1128.8	1136.8
32.5°	1085.2	1083.0	1080.4	1091.0	1099.6
35°	1040.3	1034.5	1032.5	1050.0	1061.2
37.5°	994.2	982.4	978.1	991.0	992.4
40°	937.5	920.0	912.8	900.2	896.5
42.5°	869.3	851.2	812.6	793.1	779.3
45°	787.7	756.1	693.1	681.1	653.9
47.5°	682.3	648.7	585.7	560.0	529.0
50°	552.5	533.0	494.1	462.0	408.4
52.5°	441.7	445.7	427.3	382.9	316.5
55°	350.3	374.6	367.8	317.1	241.2
57.5°	269.5	321.9	313.6	260.9	184.2
60°	193.3	275.8	258.9	214.8	137.2
62.5°	132.6	235.4	212.2	177.3	105.1
65°	94.8	196.5	172.1	146.1	84.8
67.5°	77.9	160.7	132.0	124.0	73.9
70°	71.0	129.5	96.0	108.3	72.8
72.5°	67.6	108.6	70.5	94.8	69.3
75°	61.9	95.4	55.3	83.1	65.6
77.5°	57.3	82.5	51.6	72.8	63.9
80°	51.8	65.3	51.3	61.6	58.1
82.5°	41.8	47.5	43.2	50.4	47.0
85°	28.4	33.8	30.1	38.1	31.2
87.5°	14.0	16.6	13.5	18.0	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)