

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: LUMARK

Report Number: P143924

Luminaire Tested: **LDRL-5WQ-F01-E-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143924
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5WQ-F01-E-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2311.4 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G1

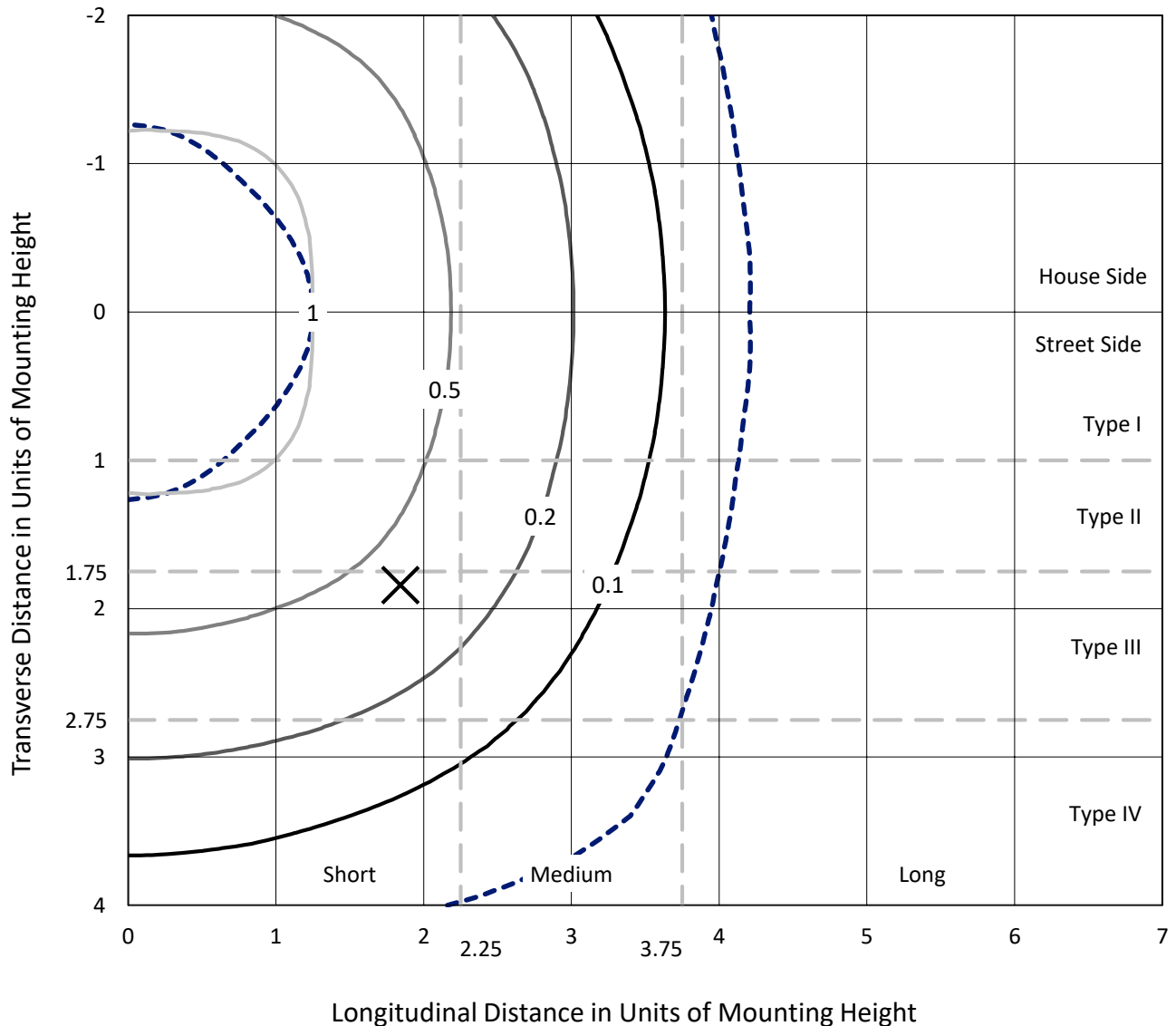
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143924
 CATALOG NUMBER: LDRL-5WQ-F01-E-7030

Iso-Footcandle Lines of Horizontal Illumination

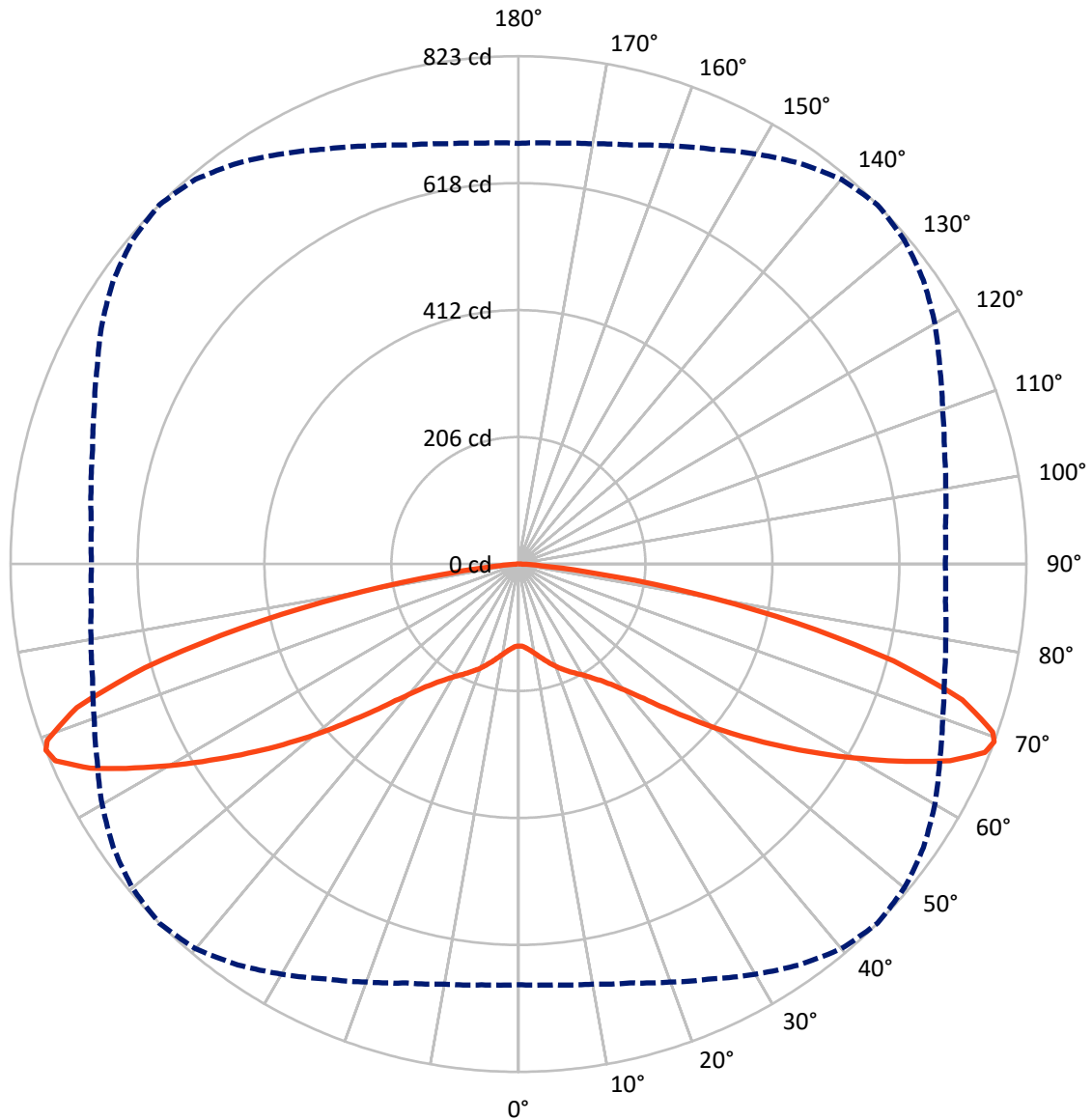
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.5 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P143924
CATALOG NUMBER: LDRL-5WQ-F01-E-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P143924

CATALOG NUMBER: LDRL-5WQ-F01-E-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1155.7	0.0	1155.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1155.7	0.0	1155.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	2311.4	0.0	2311.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.4	0.6
10°-20°	46.2	2.0
20°-30°	89.0	3.9
30°-40°	145.9	6.3
40°-50°	253.7	11.0
50°-60°	450.6	19.5
60°-70°	699.7	30.3
70°-80°	557.4	24.1
80°-90°	55.4	2.4
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°-90°	2311.4	100.0
0°-180°	2311.4	100.0



REPORT NUMBER: P143924

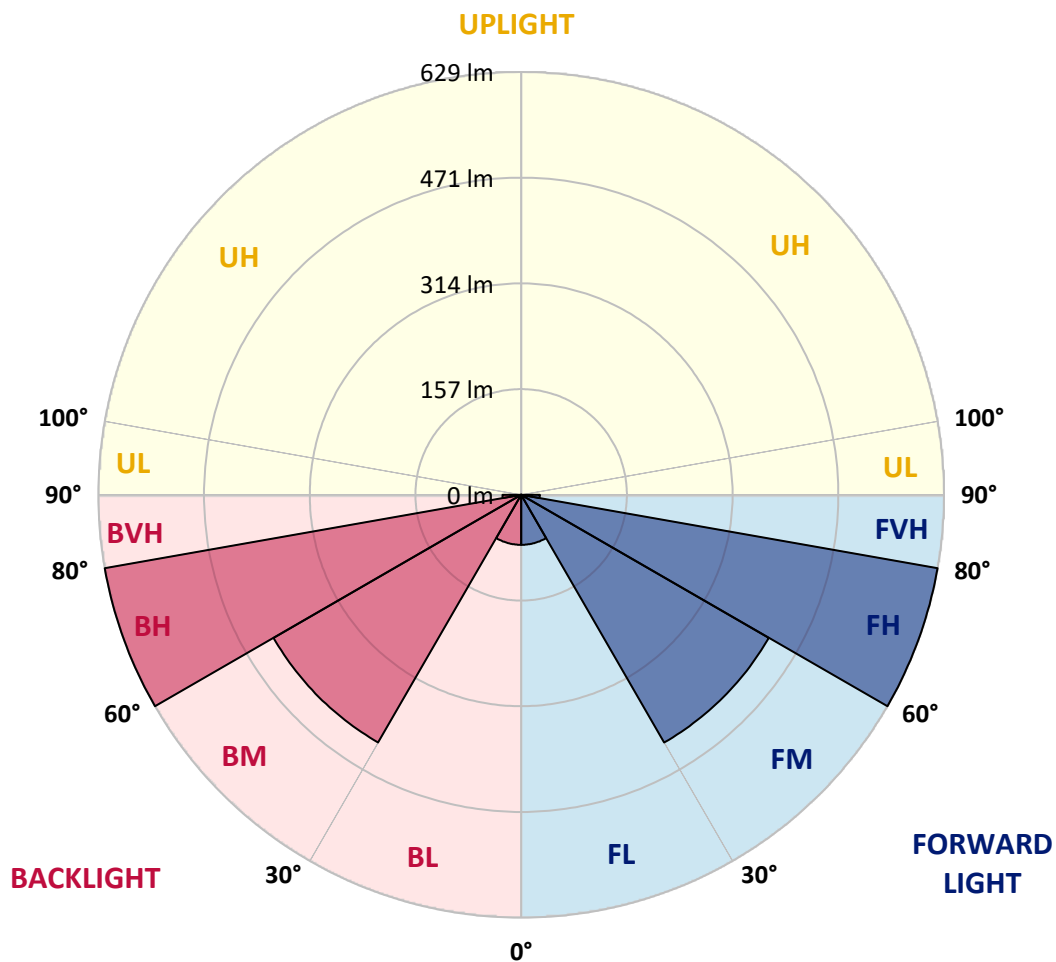
CATALOG NUMBER: LDRL-5WQ-F01-E-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	74.3	3.2			
FM	(30°-60°)	425.1	18.4			
FH	(60°-80°)	628.6	27.2			G0/660
FVH	(80°-90°)	27.7	1.2			G1/100
BL	(0°-30°)	74.3	3.2	B0/110		
BM	(30°-60°)	425.1	18.4	B1/1000		
BH	(60°-80°)	628.6	27.2	B2/1000		G0/660
BVH	(80°-90°)	27.7	1.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





REPORT NUMBER: P143924

CATALOG NUMBER: LDRL-5WQ-F01-E-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9
2.5°	133.9	133.9	133.9	133.8	133.8	133.6	133.8	133.6	133.6	133.6	133.6
5°	137.4	137.1	137.1	136.9	137.2	137.2	136.9	137.1	136.9	137.1	137.1
7.5°	141.8	141.8	141.8	141.6	141.9	141.8	141.6	141.8	141.8	141.6	141.6
10°	147.2	147.3	147.2	147.2	147.6	147.5	147.6	147.6	147.8	147.6	147.6
12.5°	153.5	153.5	153.7	153.8	154.0	154.1	154.6	154.4	154.7	154.4	154.4
15°	160.9	161.2	160.9	160.9	161.4	161.7	161.8	161.8	162.1	162.0	161.7
17.5°	168.7	168.9	168.7	168.6	169.0	169.5	169.6	169.6	170.1	169.8	169.8
20°	176.7	176.9	176.6	176.4	177.0	177.0	177.3	177.5	177.9	178.1	177.6
22.5°	184.1	184.3	184.1	184.0	184.6	184.6	185.0	185.2	185.8	185.6	185.6
25°	191.4	191.4	191.2	191.2	191.8	192.0	192.4	192.7	193.3	193.3	193.3
27.5°	198.0	198.1	197.8	197.7	198.9	199.4	199.7	200.3	200.7	201.0	200.9
30°	205.5	205.5	205.4	205.8	206.6	207.2	207.8	208.7	209.6	209.3	209.3
32.5°	214.4	214.7	214.6	215.2	216.1	217.0	217.8	218.8	219.3	220.0	219.4
35°	226.3	227.0	226.7	227.3	228.0	228.6	230.3	231.3	232.1	232.5	232.2
37.5°	241.3	241.0	241.6	241.7	243.2	244.0	246.0	247.5	248.7	249.1	248.8
40°	259.8	259.4	260.1	260.9	262.8	263.6	265.9	268.1	269.8	270.4	270.1
42.5°	282.0	282.6	283.8	284.9	287.6	289.7	292.2	295.6	297.4	298.1	297.1
45°	311.1	310.0	312.3	315.0	316.5	321.2	325.4	328.9	331.9	333.1	331.9
47.5°	344.3	344.1	346.8	350.2	354.1	358.4	363.4	367.9	373.2	373.5	372.0
50°	380.9	383.9	385.4	388.8	396.0	401.4	407.8	414.5	419.4	420.9	418.2
52.5°	425.1	427.4	428.3	433.8	440.5	447.1	456.0	464.2	469.7	470.3	469.0
55°	473.1	474.9	476.5	483.3	490.5	496.4	507.7	515.7	521.3	523.4	522.5
57.5°	522.7	524.3	526.4	533.8	541.2	549.5	560.2	569.6	576.1	580.0	578.9
60°	577.7	577.7	582.5	589.9	596.0	605.8	616.9	627.8	634.9	641.0	639.4
62.5°	635.6	637.3	642.0	648.0	654.3	663.4	676.0	689.0	699.9	704.5	704.4
65°	679.5	682.5	688.7	695.6	706.2	716.9	732.9	749.0	762.1	768.9	768.9
67.5°	692.3	694.3	702.0	712.5	727.8	744.8	766.5	789.0	806.9	815.8	810.2
69°	682.1	684.9	691.7	703.2	721.3	742.1	767.9	793.4	814.2	823.4	816.9
70°	670.1	673.3	680.1	691.4	710.1	732.3	758.1	785.5	807.8	815.7	808.3
72.5°	621.6	625.5	630.3	640.1	657.0	677.8	701.1	725.2	746.6	752.8	743.6
75°	538.8	539.6	542.0	549.2	555.2	570.0	589.8	608.9	625.1	628.7	618.9
77.5°	381.4	377.3	373.2	379.4	384.2	403.2	424.6	440.3	457.2	462.3	452.4
80°	167.2	165.7	171.5	179.6	200.9	213.5	234.5	257.0	271.3	288.0	270.1
82.5°	33.0	34.8	40.3	49.8	61.4	77.2	90.9	106.5	120.5	126.8	120.3
85°	13.4	14.6	16.6	18.5	19.9	22.3	26.2	32.6	35.9	36.3	34.5
87.5°	5.6	6.5	8.7	10.4	10.6	10.1	10.4	10.7	8.7	7.1	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P143924

CATALOG NUMBER: LDRL-5WQ-F01-E-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	132.9	132.9	132.9	132.9	132.9	132.9	132.9	132.9
2.5°	133.6	133.8	133.6	133.8	133.6	133.6	133.8	133.6
5°	136.9	137.1	136.9	136.8	136.6	136.8	136.8	136.8
7.5°	141.6	141.4	141.3	141.3	141.1	141.0	141.3	141.3
10°	147.3	147.2	146.9	146.9	146.7	146.7	146.7	146.7
12.5°	154.3	153.8	153.7	153.2	153.1	152.9	152.9	153.1
15°	161.5	161.1	160.9	160.1	160.1	160.0	160.0	160.0
17.5°	169.2	168.7	168.1	168.1	167.7	167.4	167.5	167.2
20°	177.0	176.4	176.1	176.0	175.4	175.4	175.4	175.2
22.5°	184.7	184.3	183.8	183.2	182.6	182.5	182.5	182.3
25°	192.6	191.8	190.9	190.3	189.7	189.3	189.3	189.3
27.5°	200.4	199.5	198.1	197.4	196.5	196.0	196.0	195.9
30°	208.7	207.6	206.4	205.4	204.2	203.7	203.6	203.3
32.5°	218.7	217.6	216.4	214.9	213.7	212.9	212.9	212.5
35°	231.3	230.1	229.2	227.3	225.7	224.5	224.7	225.0
37.5°	247.9	246.4	245.7	243.2	241.3	240.1	240.1	239.9
40°	269.0	267.5	265.9	263.6	261.2	259.5	259.1	259.1
42.5°	295.9	294.5	292.2	289.1	286.2	284.4	282.9	283.0
45°	329.5	327.8	324.7	320.7	317.3	314.7	312.6	312.6
47.5°	370.4	366.9	362.5	359.1	353.2	349.2	347.7	347.4
50°	417.0	410.5	405.0	400.1	393.9	389.8	387.6	386.9
52.5°	465.8	459.0	452.2	445.8	438.2	434.0	430.4	430.1
55°	518.9	510.3	501.7	495.4	486.5	482.1	478.5	476.4
57.5°	573.0	563.4	557.2	548.2	538.8	535.6	532.2	529.6
60°	634.0	623.4	615.3	605.8	599.7	592.9	589.6	587.7
62.5°	696.2	686.4	676.0	667.0	658.5	653.9	649.3	647.1
65°	759.6	743.4	731.1	718.6	708.6	700.2	693.1	692.2
67.5°	798.5	778.1	757.5	739.2	724.6	712.7	705.4	702.9
69°	801.6	779.5	753.7	731.8	714.9	703.5	694.9	692.2
70°	792.9	770.6	743.4	719.9	702.4	689.9	682.8	678.3
72.5°	729.0	709.4	683.3	660.0	644.2	629.6	622.5	620.7
75°	601.4	580.6	556.6	545.4	534.4	525.2	520.4	520.0
77.5°	427.1	405.8	387.6	372.9	361.0	355.1	356.5	351.5
80°	244.4	216.7	194.7	181.7	164.1	153.5	141.6	150.2
82.5°	105.1	84.9	64.7	52.6	40.1	31.8	26.2	24.4
85°	29.4	24.0	20.1	18.4	16.6	14.8	12.5	11.6
87.5°	10.0	9.5	8.4	8.4	7.7	6.5	4.5	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)