

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P677514

Luminaire Tested: ML406FL9FS1E-TL40R2GMW-2700K

Issue Date: 4/25/2023

Test Information

Test Method: LM-79-2019
Report Number: P677514
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2304-979-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML406FL9FS1E-TL40R2GMW-2700K
Description: RETROFIT, CONICAL LENS TRIM
Light Source: (1) SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

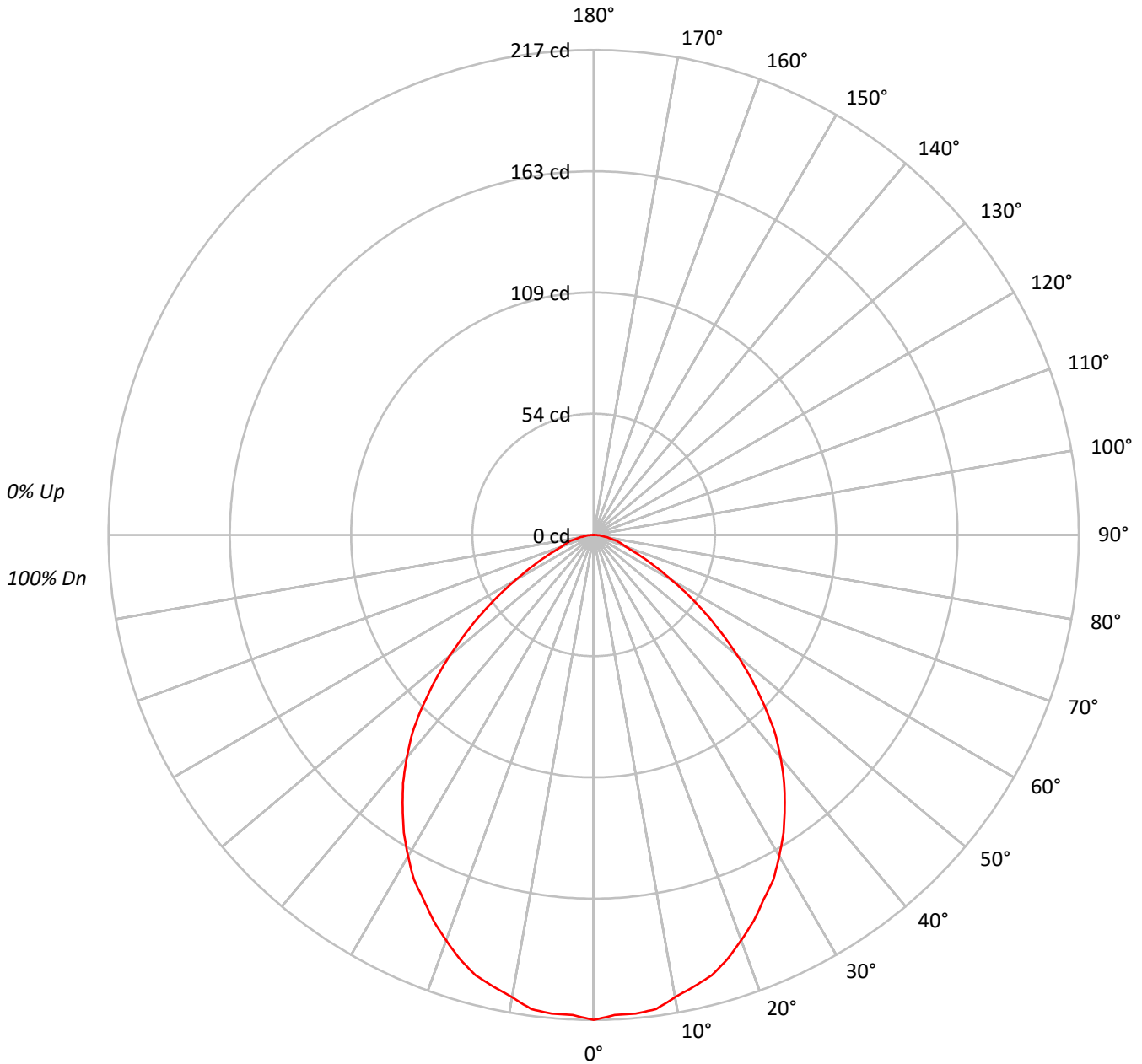
Lumens per Lamp: N/A
Luminaire Lumens: 430.9 lumens
Efficiency: N/A
Efficacy: 51.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.23
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 8.3
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: 24 FT



TEST NUMBER: P677514
CATALOG NUMBER: ML406FL9FS1E-TL40R2GMW-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P677514

CATALOG NUMBER: ML406FL9FS1E-TL40R2GMW-2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
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	62	71	66	62	69	65	61	59																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																			
7	70	58	50	45	69	57	50	45	56	49	44	55	48	44	53	48	44	42																			
8	66	53	46	40	64	53	45	40	52	45	40	50	44	40	49	44	40	38																			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34																			
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	26766
5°	26621
10°	26302
15°	26050
20°	25334
25°	24497
30°	23643
35°	22436
40°	20932
45°	18839
50°	16119
55°	13118
60°	9868
65°	7297
70°	5410
75°	5242
80°	4262
85°	4246

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18839 cd/sqm



TEST NUMBER: P677514

CATALOG NUMBER: ML406FL9FS1E-TL40R2GMW-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.4	4.7
10°-20°	57.3	13.3
20°-30°	83.0	19.3
30°-40°	93.0	21.6
40°-50°	83.0	19.2
50°-60°	54.6	12.7
60°-70°	25.5	5.9
70°-80°	11.2	2.6
80°-90°	3.0	0.7
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°	160.7	37.3
0°-40°	253.7	58.9
0°-60°	391.2	90.8
0°-90°	430.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	430.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	217	
5°	215	20
15°	204	57
25°	180	83
35°	149	93
45°	108	83
55°	61	55
65°	25	26
75°	11	11
85°	3	3
90°	0	



TEST NUMBER: P677514

CATALOG NUMBER: ML406FL9FS1E-TL40R2GMW-2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	217
2.5°	215
5°	215
7.5°	214
10°	210
12.5°	207
15°	204
17.5°	199
20°	193
22.5°	187
25°	180
27.5°	174
30°	166
32.5°	158
35°	149
37.5°	140
40°	130
42.5°	120
45°	108
47.5°	96
50°	84
52.5°	72
55°	61
57.5°	50
60°	40
62.5°	32
65°	25
67.5°	19
70°	15
72.5°	13
75°	11
77.5°	8
80°	6
82.5°	4
85°	3
87.5°	1
90°	0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)