

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: NEO-RAY

Report Number: P1058050

Luminaire Tested: S122RDR-S675D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S675D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

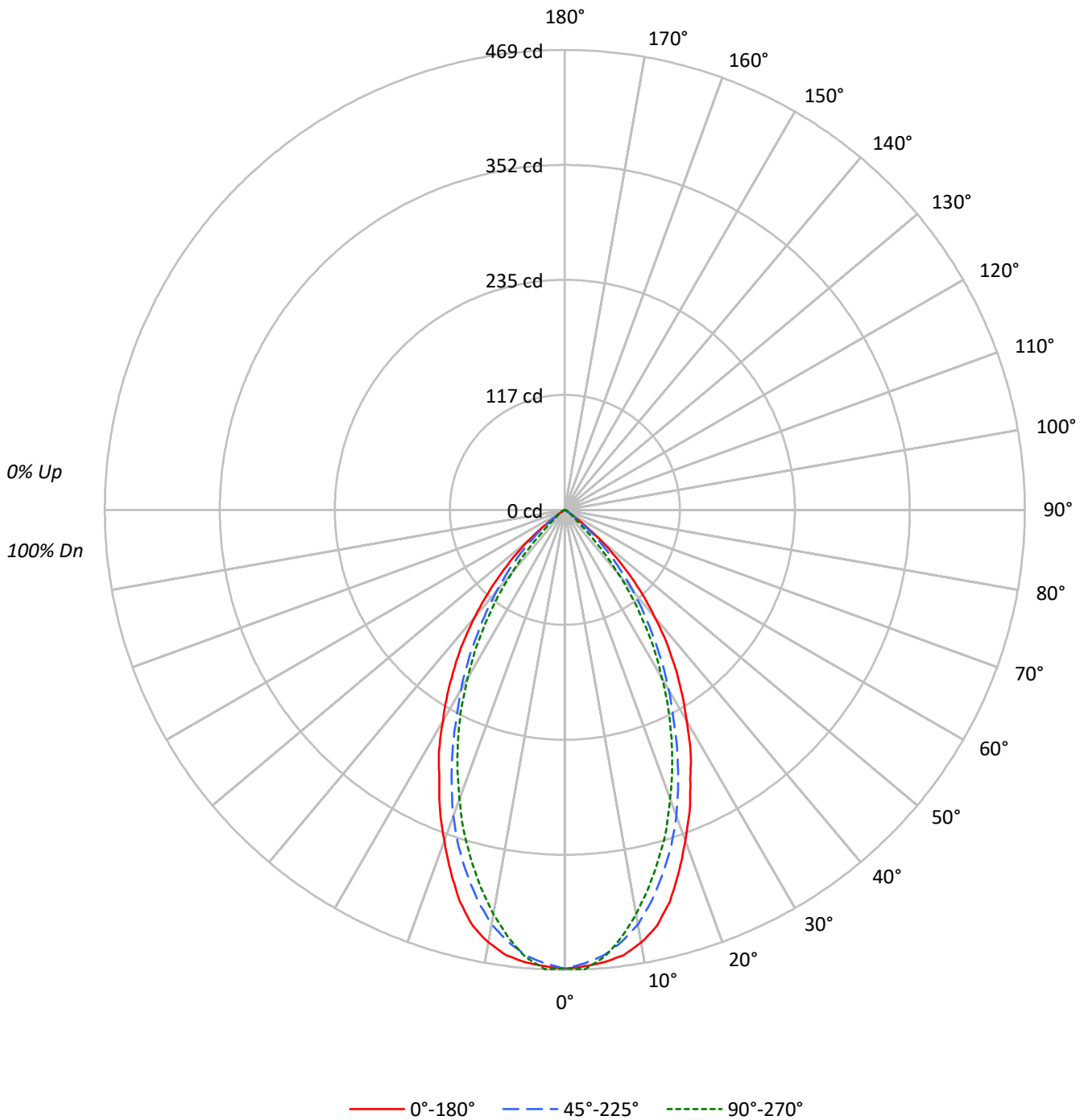
Lumens per Lamp: N/A
Luminaire Lumens: 440.0 lumens
Efficiency: N/A
Efficacy: 17.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: 24 FT

TEST NUMBER: P1058050

CATALOG NUMBER: S122RDR-S675D840-X4F0-XX-UDD-BVL-B

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93				
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86				
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79				
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73				
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67				
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62				
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58				
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54				
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51				
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8634	8634	8634
5°	8576	8446	8484
10°	8396	8044	7841
15°	7899	7351	7049
20°	7052	6527	6158
25°	6163	5520	5237
30°	5291	4511	4217
35°	4413	3521	3165
40°	3433	2597	2026
45°	2401	1730	877
50°	1306	910	313
55°	190	318	222
60°	37	74	148
65°	0	44	87
70°	0	0	54
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2401 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	9.8
10°-20°	108.4	24.6
20°-30°	126.3	28.7
30°-40°	101.2	23.0
40°-50°	50.3	11.4
50°-60°	9.9	2.3
60°-70°	0.9	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	277.6	63.1
0°-40°	378.9	86.1
0°-60°	439.1	99.8
0°-90°	440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	468	468	468	468	468	
5°	463	463	456	457	458	44
15°	414	406	385	375	369	115
25°	303	288	271	265	257	139
35°	196	176	156	149	140	122
45°	92	81	66	44	34	71
55°	6	12	10	6	7	12
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	467.9	467.9	467.9	467.9	467.9
2.5°	465.9	467.9	463.0	467.9	468.9
5°	463.0	463.0	456.0	457.0	458.0
7.5°	458.0	456.0	444.2	442.2	440.2
10°	448.1	444.2	429.3	421.4	418.5
12.5°	434.3	428.3	408.6	399.7	394.7
15°	413.5	405.6	384.8	374.9	369.0
17.5°	386.8	379.9	360.1	349.2	343.3
20°	359.1	349.2	332.4	321.5	313.6
22.5°	332.4	319.5	301.7	293.8	285.9
25°	302.7	287.9	271.1	265.1	257.2
27.5°	278.0	259.2	239.4	235.4	228.5
30°	248.3	230.5	211.7	205.8	197.9
32.5°	222.6	202.8	184.0	177.1	170.2
35°	195.9	176.1	156.3	149.4	140.5
37.5°	170.2	151.4	131.6	120.7	112.8
40°	142.5	126.6	107.8	94.0	84.1
42.5°	117.7	103.9	86.1	68.3	58.4
45°	92.0	81.1	66.3	44.5	33.6
47.5°	68.3	60.3	48.5	25.7	17.8
50°	45.5	42.5	31.7	12.9	10.9
52.5°	24.7	26.7	18.8	7.9	8.9
55°	5.9	11.9	9.9	5.9	6.9
57.5°	1.0	2.0	4.9	4.9	4.9
60°	1.0	1.0	2.0	3.0	4.0
62.5°	1.0	0.0	1.0	2.0	3.0
65°	0.0	0.0	1.0	1.0	2.0
67.5°	0.0	0.0	0.0	1.0	1.0
70°	0.0	0.0	0.0	1.0	1.0
72.5°	0.0	0.0	0.0	0.0	1.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)