

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1058396

Luminaire Tested: S122RDR-H485D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H485D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

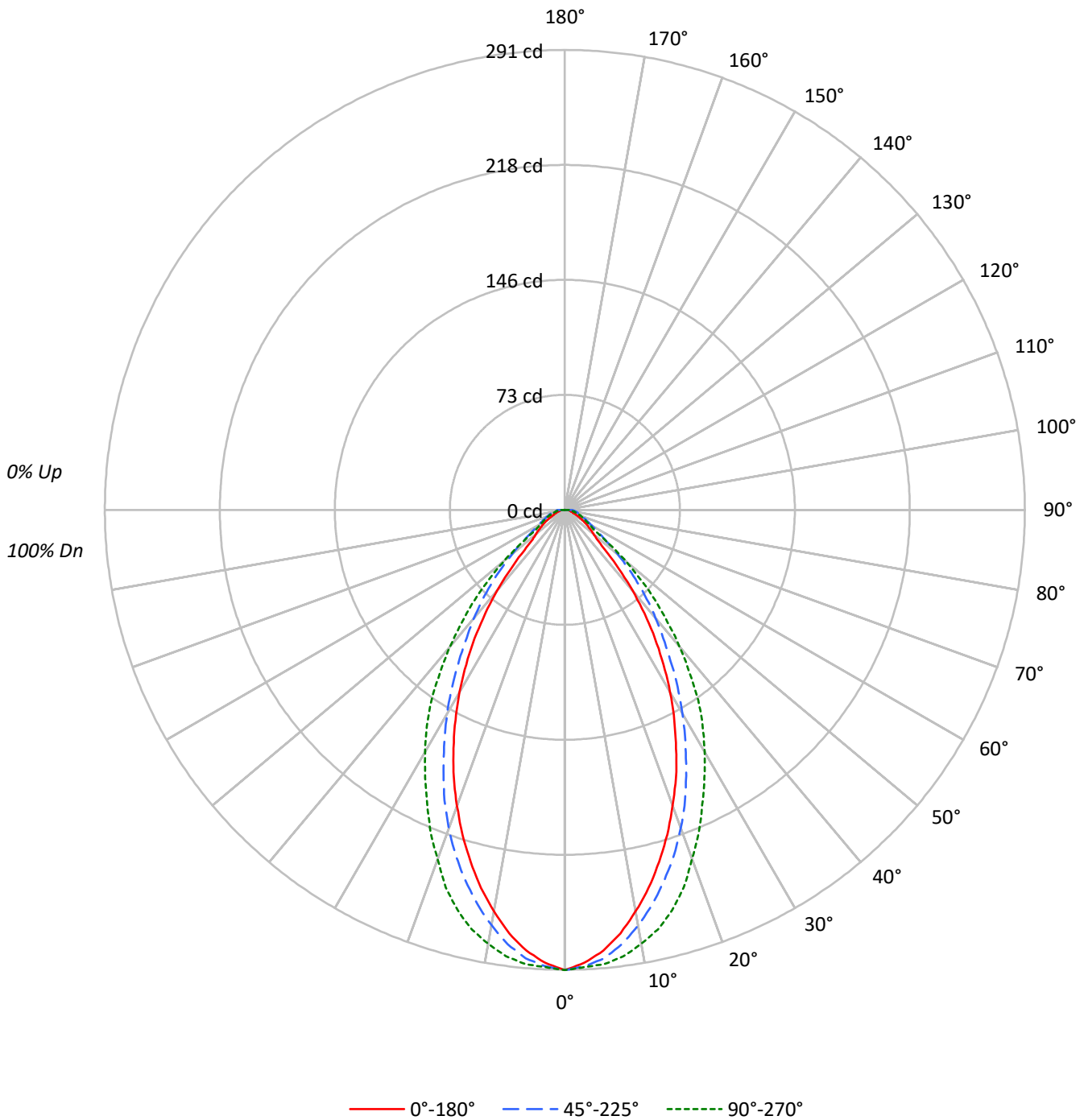
Lumens per Lamp: N/A
Luminaire Lumens: 351.3 lumens
Efficiency: N/A
Efficacy: 20.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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

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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65			65	
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46			46	
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42			42	
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5373	5373	5373
5°	5185	5275	5344
10°	4832	5003	5224
15°	4403	4638	5009
20°	3914	4210	4621
25°	3392	3697	4190
30°	2838	3170	3767
35°	2239	2627	3316
40°	1604	2149	2717
45°	939	1696	2103
50°	677	1234	1418
55°	569	881	743
60°	458	712	635
65°	375	633	585
70°	318	610	550
75°	307	649	535
80°	340	797	574
85°	572	1249	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2103 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	7.6
10°-20°	68.4	19.5
20°-30°	84.0	23.9
30°-40°	74.3	21.1
40°-50°	47.4	13.5
50°-60°	23.1	6.6
60°-70°	13.8	3.9
70°-80°	8.8	2.5
80°-90°	4.8	1.4
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°-30°	179.1	51.0
0°-40°	253.3	72.1
0°-60°	323.9	92.2
0°-90°	351.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	351.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	291	291	291	291	291	
5°	280	286	285	286	288	26
15°	230	237	243	254	262	64
25°	167	172	182	193	206	76
35°	99	105	117	133	147	62
45°	36	46	65	73	81	30
55°	18	24	27	26	23	16
65°	9	16	14	13	13	9
75°	4	10	9	8	8	5
85°	3	5	6	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	291.2	291.2	291.2	291.2	291.2
2.5°	286.9	292.3	289.0	289.0	289.6
5°	279.9	285.8	284.8	285.8	288.5
7.5°	270.2	276.2	277.2	281.5	284.8
10°	257.9	263.8	267.0	274.0	278.8
12.5°	245.0	250.9	255.7	264.9	271.9
15°	230.5	236.9	242.8	253.6	262.2
17.5°	215.4	221.9	229.4	240.2	250.4
20°	199.3	205.2	214.4	224.6	235.3
22.5°	183.7	189.1	198.8	208.5	221.4
25°	166.6	172.5	181.6	192.9	205.8
27.5°	149.9	155.8	164.9	177.8	191.3
30°	133.2	138.6	148.8	162.3	176.8
32.5°	116.0	121.4	132.7	147.2	162.3
35°	99.4	104.8	116.6	132.7	147.2
37.5°	82.7	88.6	102.1	117.1	129.5
40°	66.6	73.6	89.2	102.1	112.8
42.5°	50.5	60.2	76.8	87.6	96.2
45°	36.0	46.2	65.0	73.1	80.6
47.5°	27.4	35.5	53.7	59.6	64.5
50°	23.6	29.0	43.0	47.3	49.4
52.5°	20.4	25.8	34.4	36.0	34.9
55°	17.7	23.6	27.4	25.8	23.1
57.5°	15.0	22.0	22.6	19.3	19.9
60°	12.4	19.9	19.3	16.7	17.2
62.5°	10.2	18.3	16.7	15.0	15.0
65°	8.6	16.1	14.5	13.4	13.4
67.5°	7.0	14.5	12.9	11.8	11.8
70°	5.9	12.9	11.3	10.2	10.2
72.5°	5.4	11.3	10.2	9.1	9.1
75°	4.3	9.7	9.1	8.1	7.5
77.5°	3.8	8.1	8.1	7.5	6.4
80°	3.2	7.0	7.5	6.4	5.4
82.5°	3.2	6.4	6.4	5.9	4.3
85°	2.7	5.4	5.9	5.4	3.8
87.5°	1.6	4.8	4.8	4.3	2.7
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	7.86	9.14	8.23	9.45	9.77	7.39	8.67	7.75	8.98	9.29
	3H	9.04	10.18	9.42	10.51	10.87	8.95	10.09	9.33	10.42	10.78
	4H	9.47	10.53	9.88	10.89	11.27	9.63	10.69	10.04	11.04	11.43
	6H	9.82	10.80	10.24	11.17	11.56	10.28	11.25	10.69	11.63	12.02
	8H	10.01	10.94	10.45	11.33	11.74	10.57	11.49	11.00	11.88	12.29
	12H	10.23	11.12	10.67	11.50	11.93	10.89	11.78	11.32	12.16	12.59
4H	2H	8.36	9.43	8.77	9.78	10.16	7.99	9.05	8.39	9.40	9.78
	3H	10.01	10.89	10.43	11.29	11.70	9.79	10.66	10.20	11.07	11.47
	4H	10.78	11.57	11.22	11.99	12.43	10.63	11.42	11.07	11.84	12.28
	6H	11.39	12.07	11.85	12.52	12.98	11.48	12.16	11.95	12.61	13.08
	8H	11.68	12.32	12.15	12.77	13.24	11.87	12.51	12.34	12.96	13.43
	12H	12.00	12.56	12.48	13.04	13.52	12.32	12.88	12.80	13.36	13.84
8H	4H	11.20	11.84	11.67	12.29	12.76	11.09	11.73	11.56	12.17	12.65
	6H	12.15	12.67	12.66	13.17	13.65	12.19	12.72	12.70	13.21	13.69
	8H	12.69	13.16	13.21	13.68	14.17	12.77	13.24	13.29	13.76	14.25
	12H	13.26	13.67	13.77	14.17	14.74	13.45	13.86	13.96	14.36	14.93
12H	4H	11.27	11.83	11.76	12.32	12.79	11.17	11.74	11.66	12.22	12.69
	6H	12.33	12.80	12.86	13.32	13.81	12.38	12.85	12.90	13.36	13.85
	8H	13.02	13.43	13.53	13.93	14.50	13.09	13.50	13.60	14.00	14.57