

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: P1058406

Luminaire Tested: S122RDR-H485D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058406
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H485D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

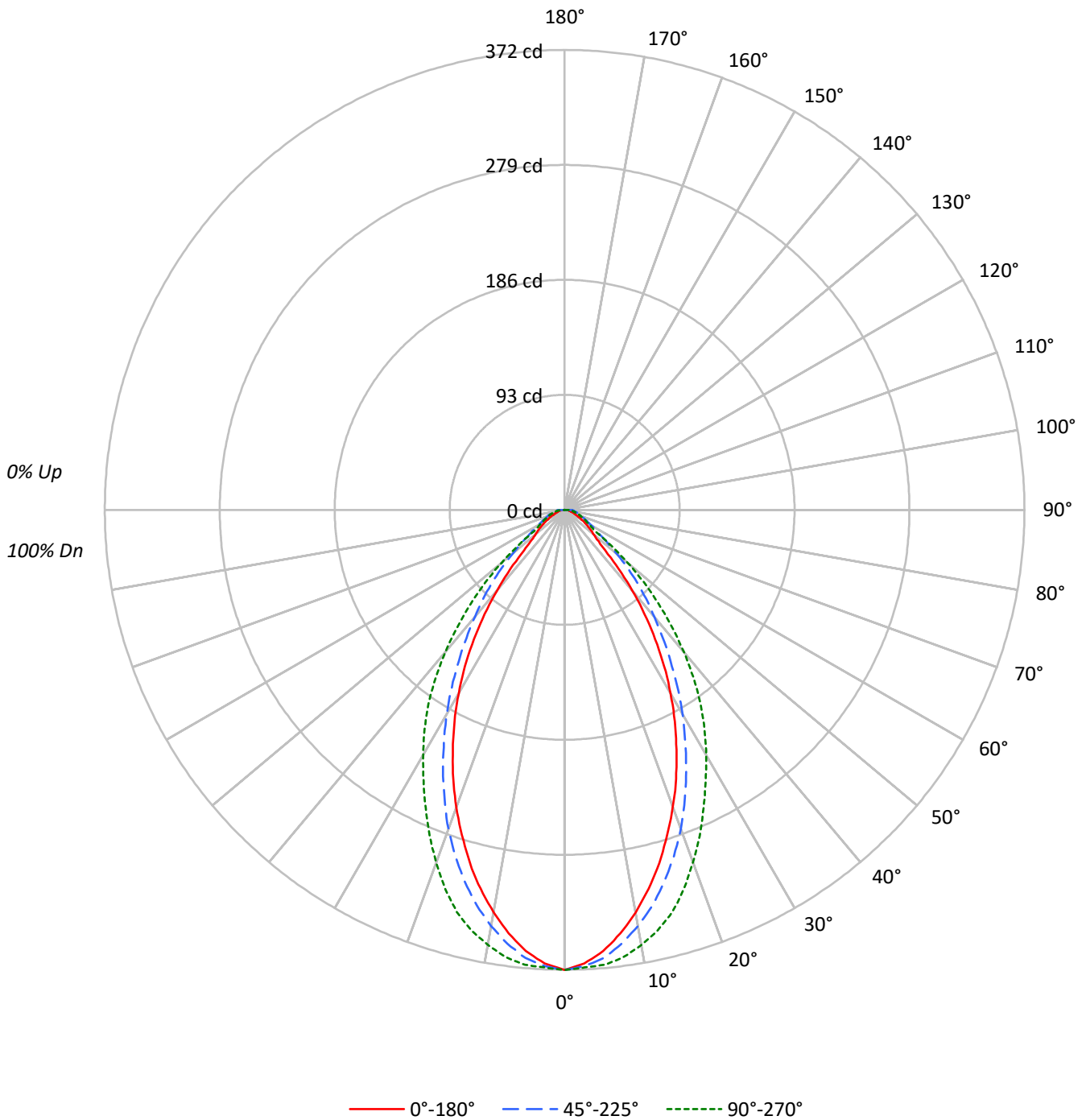
Lumens per Lamp: N/A
Luminaire Lumens: 451.4 lumens
Efficiency: N/A
Efficacy: 25.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	102	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	6868	6868	6868
5°	6639	6741	6842
10°	6196	6404	6695
15°	5653	5949	6434
20°	5029	5398	5962
25°	4357	4740	5416
30°	3652	4065	4879
35°	2877	3363	4323
40°	2052	2717	3611
45°	1213	2150	2800
50°	873	1556	1906
55°	730	1120	962
60°	590	897	816
65°	485	795	747
70°	415	777	718
75°	392	791	713
80°	414	935	765
85°	593	1524	932

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2800 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	7.6
10°-20°	87.7	19.4
20°-30°	108.2	24.0
30°-40°	96.2	21.3
40°-50°	61.4	13.6
50°-60°	29.5	6.5
60°-70°	17.3	3.8
70°-80°	11.1	2.4
80°-90°	5.9	1.3
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°	230.0	51.0
0°-40°	326.3	72.3
0°-60°	417.2	92.4
0°-90°	451.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	451.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	358	365	364	366	369	33
15°	296	303	311	326	337	82
25°	214	222	233	249	266	98
35°	128	138	149	172	192	79
45°	46	60	82	96	107	39
55°	23	29	35	34	30	20
65°	11	20	18	17	17	11
75°	6	12	11	10	10	6
85°	3	7	7	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	372.2	372.2	372.2	372.2	372.2
2.5°	367.2	373.3	369.4	369.4	370.5
5°	358.4	365.0	363.9	366.1	369.4
7.5°	345.6	352.8	353.9	360.0	365.0
10°	330.7	338.5	341.8	350.6	357.3
12.5°	314.1	321.9	327.9	339.0	348.4
15°	295.9	303.1	311.4	325.7	336.8
17.5°	276.0	285.4	293.7	308.6	321.3
20°	256.1	264.9	274.9	289.2	303.6
22.5°	235.6	243.9	253.8	268.8	285.4
25°	214.0	222.3	232.8	249.4	266.0
27.5°	193.0	201.3	211.3	229.5	247.2
30°	171.4	179.7	190.8	209.6	229.0
32.5°	149.9	158.7	169.8	190.2	210.7
35°	127.7	137.7	149.3	172.0	191.9
37.5°	106.2	116.1	130.5	152.6	171.4
40°	85.2	96.8	112.8	132.7	149.9
42.5°	64.7	77.4	97.3	113.4	128.3
45°	46.5	60.3	82.4	95.7	107.3
47.5°	35.4	45.3	68.0	78.5	86.8
50°	30.4	36.5	54.2	61.9	66.4
52.5°	26.5	32.1	43.1	47.0	47.0
55°	22.7	29.3	34.8	33.7	29.9
57.5°	19.4	26.5	28.8	24.3	25.4
60°	16.0	24.3	24.3	21.6	22.1
62.5°	13.3	22.7	21.0	18.8	19.4
65°	11.1	19.9	18.2	16.6	17.1
67.5°	8.8	17.7	16.0	14.9	14.9
70°	7.7	16.0	14.4	13.3	13.3
72.5°	6.6	13.8	12.7	11.6	11.6
75°	5.5	12.2	11.1	10.5	10.0
77.5°	5.0	10.5	10.0	8.8	8.3
80°	3.9	8.8	8.8	8.3	7.2
82.5°	3.3	7.7	7.7	7.2	6.1
85°	2.8	6.6	7.2	6.1	4.4
87.5°	2.2	6.1	6.1	5.0	3.3
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	8.36	9.63	8.72	9.95	10.26	8.15	9.42	8.51	9.74	10.05
	3H	9.59	10.72	9.97	11.05	11.42	9.74	10.88	10.12	11.21	11.57
	4H	10.04	11.10	10.44	11.45	11.83	10.46	11.52	10.87	11.87	12.26
	6H	10.42	11.40	10.84	11.77	12.16	11.11	12.09	11.53	12.46	12.85
	8H	10.58	11.50	11.01	11.89	12.30	11.45	12.37	11.88	12.76	13.16
	12H	10.74	11.62	11.17	12.00	12.43	11.74	12.63	12.18	13.01	13.44
4H	2H	8.91	9.96	9.31	10.31	10.70	8.74	9.80	9.14	10.15	10.53
	3H	10.60	11.47	11.01	11.87	12.28	10.58	11.45	10.99	11.86	12.26
	4H	11.40	12.18	11.83	12.60	13.04	11.46	12.24	11.89	12.66	13.10
	6H	12.04	12.72	12.51	13.17	13.63	12.30	12.98	12.76	13.42	13.89
	8H	12.29	12.92	12.76	13.37	13.84	12.73	13.36	13.20	13.81	14.28
	12H	12.54	13.10	13.02	13.58	14.05	13.13	13.69	13.62	14.17	14.65
8H	4H	11.82	12.45	12.29	12.90	13.37	11.87	12.51	12.34	12.96	13.43
	6H	12.79	13.31	13.30	13.81	14.29	12.96	13.48	13.46	13.98	14.46
	8H	13.28	13.75	13.80	14.26	14.76	13.55	14.02	14.08	14.54	15.03
	12H	13.78	14.20	14.30	14.69	15.26	14.16	14.57	14.67	15.06	15.64
12H	4H	11.89	12.45	12.37	12.93	13.40	11.95	12.51	12.44	12.99	13.47
	6H	12.96	13.43	13.48	13.94	14.44	13.12	13.59	13.64	14.10	14.60
	8H	13.59	14.01	14.11	14.50	15.07	13.84	14.25	14.35	14.74	15.32