

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058008

Luminaire Tested: S122RDRP-S485D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058008
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

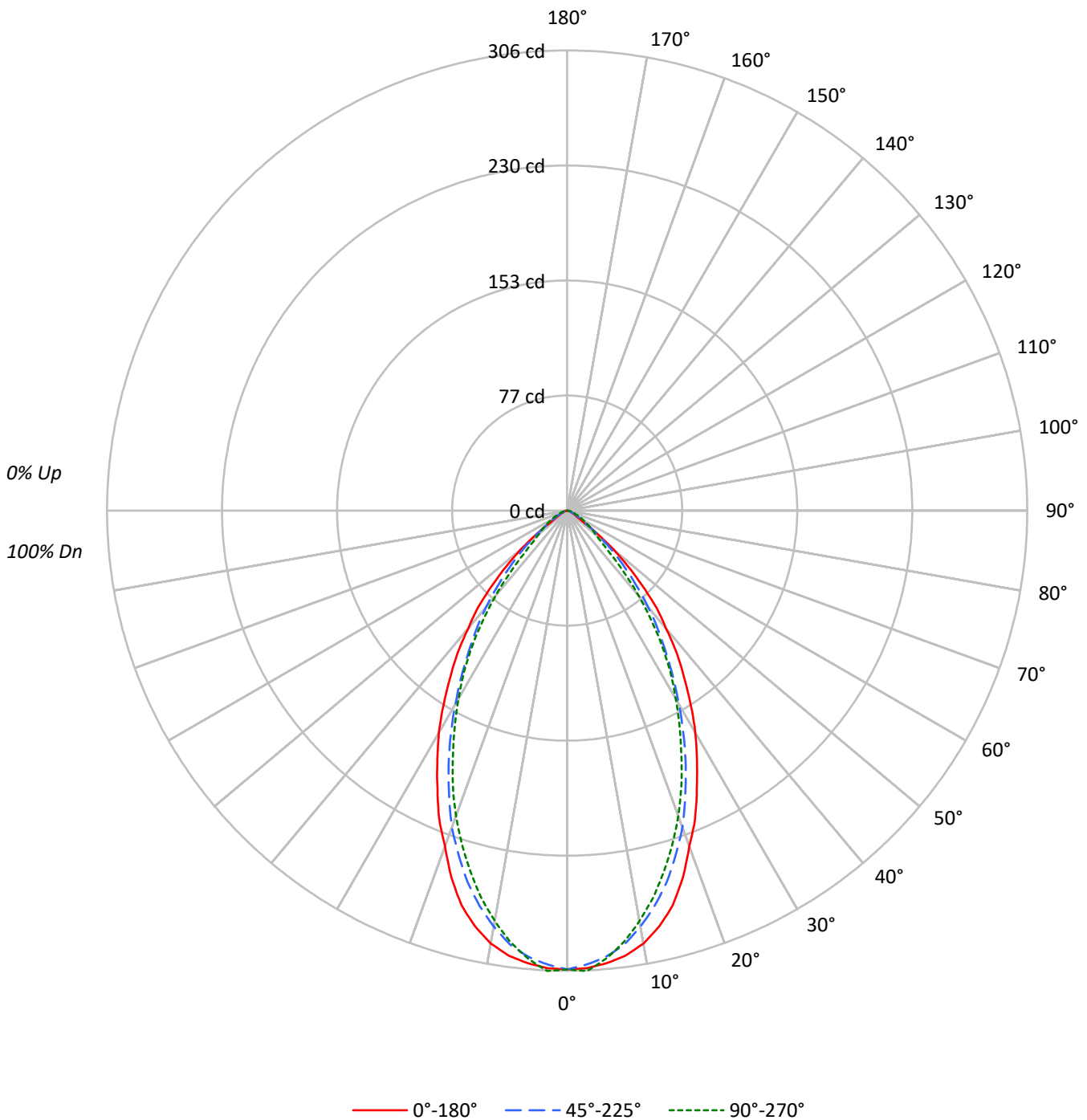
Lumens per Lamp: N/A
Luminaire Lumens: 328.1 lumens
Efficiency: N/A
Efficacy: 16.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5630	5630	5630
5°	5596	5516	5538
10°	5477	5261	5192
15°	5188	4887	4747
20°	4664	4401	4245
25°	4153	3795	3659
30°	3633	3166	3075
35°	3059	2566	2482
40°	2464	2023	1790
45°	1842	1461	1065
50°	1154	944	700
55°	392	508	569
60°	225	314	450
65°	162	214	345
70°	129	162	264
75°	86	128	214
80°	64	128	191
85°	0	0	127

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.1	8.6
10°-20°	72.0	21.9
20°-30°	86.7	26.4
30°-40°	74.1	22.6
40°-50°	43.4	13.2
50°-60°	15.7	4.8
60°-70°	5.6	1.7
70°-80°	2.2	0.7
80°-90°	0.4	0.1
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°	186.8	56.9
0°-40°	260.9	79.5
0°-60°	320.0	97.5
0°-90°	328.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	328.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	305	305	305	305	305	
5°	302	303	298	299	299	29
15°	272	267	256	251	248	75
25°	204	196	186	183	180	94
35°	136	126	114	113	110	85
45°	71	63	56	47	41	54
55°	12	17	16	16	18	15
65°	4	4	5	7	8	4
75°	1	2	2	2	3	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	305.1	305.1	305.1	305.1	305.1
2.5°	304.5	305.1	302.1	305.1	306.4
5°	302.1	302.7	297.8	299.0	299.0
7.5°	298.4	297.8	291.1	289.9	289.3
10°	292.3	290.5	280.8	278.9	277.1
12.5°	283.2	279.6	269.2	266.2	263.7
15°	271.6	267.4	255.8	250.9	248.5
17.5°	255.8	250.9	240.0	235.1	232.7
20°	237.5	232.7	224.1	218.6	216.2
22.5°	222.3	214.4	205.2	201.6	198.5
25°	204.0	195.5	186.4	183.3	179.7
27.5°	187.0	176.6	167.5	165.1	162.0
30°	170.5	159.6	148.6	148.6	144.3
32.5°	152.9	142.5	130.9	130.3	127.9
35°	135.8	125.5	113.9	112.7	110.2
37.5°	120.0	109.6	98.7	95.0	92.0
40°	102.3	93.2	84.0	78.0	74.3
42.5°	88.3	78.0	68.8	61.5	56.6
45°	70.6	63.3	56.0	46.9	40.8
47.5°	54.8	49.9	43.9	33.5	30.5
50°	40.2	37.8	32.9	25.0	24.4
52.5°	25.6	26.8	23.8	19.5	21.3
55°	12.2	17.1	15.8	16.4	17.7
57.5°	7.9	8.5	11.6	13.4	14.6
60°	6.1	6.1	8.5	11.0	12.2
62.5°	4.9	4.9	6.7	9.1	9.7
65°	3.7	4.3	4.9	6.7	7.9
67.5°	3.0	3.0	3.7	5.5	6.1
70°	2.4	2.4	3.0	4.3	4.9
72.5°	1.8	1.8	2.4	3.7	3.7
75°	1.2	1.8	1.8	2.4	3.0
77.5°	1.2	1.2	1.2	1.8	2.4
80°	0.6	0.6	1.2	1.2	1.8
82.5°	0.6	0.6	0.6	0.6	1.2
85°	0.0	0.0	0.0	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0
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	1.87	3.03	2.23	3.34	3.66	5.28	6.45	5.65	6.76	7.08
	3H	2.37	3.40	2.76	3.73	4.09	6.02	7.04	6.40	7.37	7.74
	4H	2.50	3.45	2.91	3.80	4.19	6.23	7.18	6.64	7.53	7.92
	6H	2.58	3.44	2.99	3.81	4.21	6.38	7.24	6.79	7.62	8.01
	8H	2.58	3.40	3.01	3.79	4.20	6.41	7.22	6.84	7.62	8.02
	12H	2.54	3.32	2.98	3.71	4.14	6.40	7.19	6.84	7.57	8.00
4H	2H	2.19	3.13	2.59	3.49	3.87	5.25	6.20	5.66	6.55	6.94
	3H	2.83	3.59	3.24	4.00	4.41	6.14	6.90	6.55	7.31	7.72
	4H	3.06	3.74	3.50	4.16	4.61	6.41	7.09	6.85	7.52	7.96
	6H	3.17	3.76	3.64	4.21	4.68	6.63	7.21	7.09	7.66	8.13
	8H	3.19	3.73	3.66	4.18	4.66	6.67	7.21	7.14	7.66	8.14
	12H	3.15	3.63	3.64	4.12	4.59	6.69	7.16	7.18	7.65	8.13
8H	4H	3.16	3.71	3.64	4.16	4.63	6.34	6.88	6.81	7.33	7.81
	6H	3.33	3.77	3.83	4.27	4.75	6.59	7.03	7.09	7.53	8.01
	8H	3.37	3.76	3.90	4.28	4.78	6.65	7.04	7.17	7.56	8.05
	12H	3.35	3.69	3.86	4.19	4.77	6.70	7.05	7.22	7.55	8.12
12H	4H	3.15	3.63	3.64	4.11	4.59	6.29	6.77	6.78	7.25	7.73
	6H	3.32	3.72	3.85	4.24	4.73	6.54	6.93	7.06	7.45	7.95
	8H	3.39	3.74	3.91	4.24	4.81	6.62	6.97	7.14	7.46	8.04