

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: P1057925

Luminaire Tested: S122RDRP-S290D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S290D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

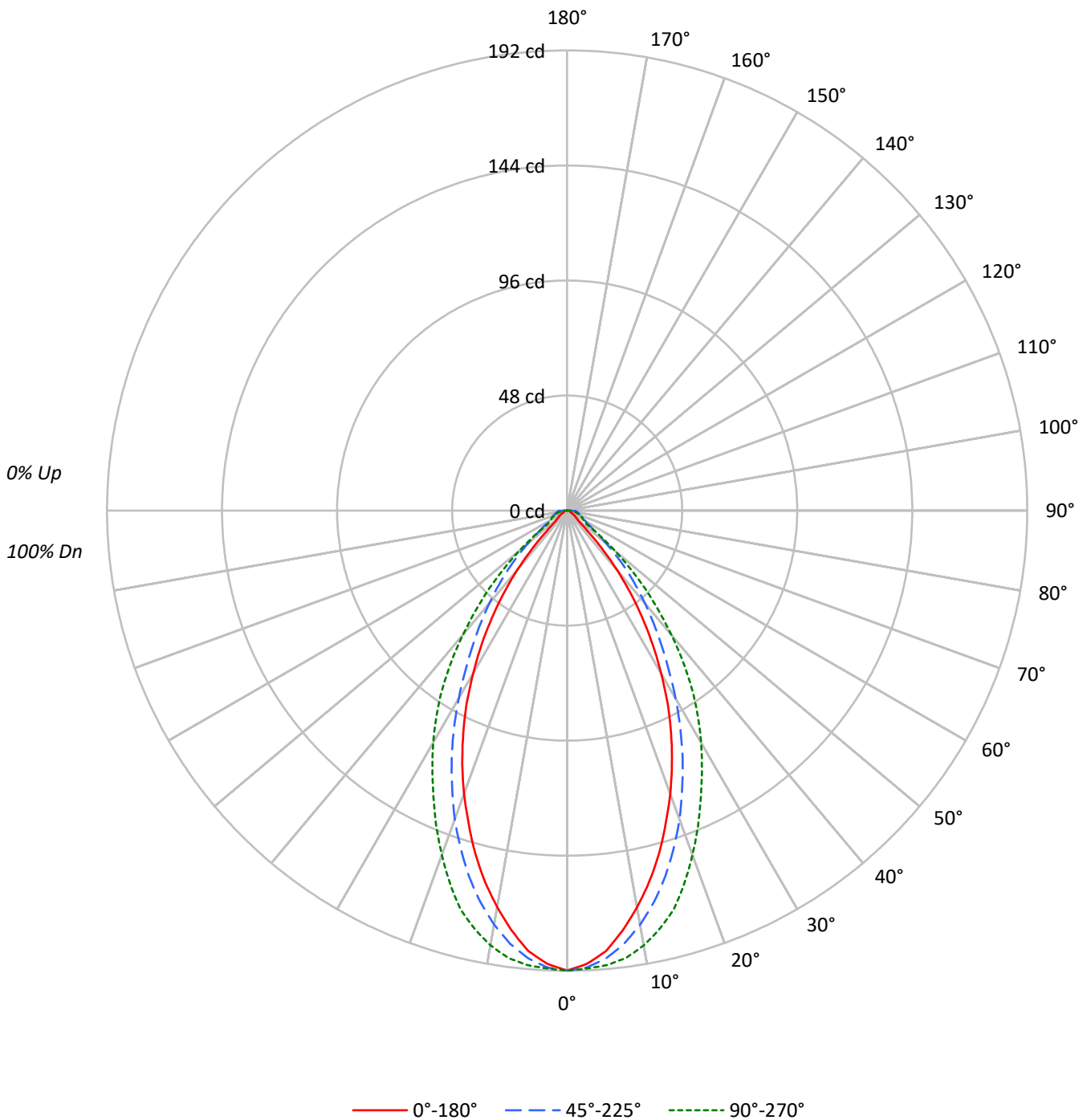
Lumens per Lamp: N/A
Luminaire Lumens: 206.9 lumens
Efficiency: N/A
Efficacy: 16.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57					57			
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3541	3541	3541
5°	3419	3473	3527
10°	3148	3286	3451
15°	2831	3020	3288
20°	2468	2692	3002
25°	2089	2321	2688
30°	1668	1926	2382
35°	1234	1548	2045
40°	780	1214	1628
45°	308	911	1200
50°	158	611	738
55°	129	402	331
60°	96	325	299
65°	79	306	306
70°	81	318	297
75°	107	364	314
80°	159	468	351
85°	233	783	466

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1565 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.6	8.5
10°-20°	44.3	21.4
20°-30°	52.7	25.5
30°-40°	43.8	21.2
40°-50°	24.5	11.8
50°-60°	9.9	4.8
60°-70°	6.3	3.1
70°-80°	4.7	2.3
80°-90°	3.0	1.5
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°	114.6	55.4
0°-40°	158.4	76.6
0°-60°	192.8	93.2
0°-90°	206.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	206.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	192	192	192	192	192	
5°	185	188	188	189	190	17
15°	148	153	158	166	172	41
25°	103	107	114	123	132	47
35°	55	60	69	80	91	34
45°	12	20	35	41	46	11
55°	4	8	12	12	10	4
65°	2	7	7	7	7	2
75°	2	5	5	5	4	2
85°	1	3	4	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	191.9	191.9	191.9	191.9	191.9
2.5°	189.3	192.3	190.8	190.8	191.2
5°	184.6	187.9	187.5	189.0	190.4
7.5°	176.8	180.5	182.3	185.7	188.2
10°	168.0	172.1	175.4	180.5	184.2
12.5°	158.5	162.5	167.3	173.9	178.7
15°	148.2	152.6	158.1	166.2	172.1
17.5°	136.8	141.5	147.8	156.6	162.9
20°	125.7	130.5	137.1	146.0	152.9
22.5°	114.3	118.4	125.4	134.2	142.6
25°	102.6	106.6	114.0	122.8	132.0
27.5°	90.8	94.9	102.2	111.4	121.7
30°	78.3	82.7	90.4	100.7	111.8
32.5°	66.5	71.0	79.0	90.4	101.5
35°	54.8	59.9	68.7	80.1	90.8
37.5°	43.4	49.3	59.2	69.9	79.4
40°	32.4	38.6	50.4	59.6	67.6
42.5°	21.3	28.7	42.3	50.0	56.2
45°	11.8	19.9	34.9	40.8	46.0
47.5°	6.6	12.9	27.6	32.4	35.3
50°	5.5	9.6	21.3	24.6	25.7
52.5°	4.4	8.8	16.2	18.0	17.3
55°	4.0	8.5	12.5	12.1	10.3
57.5°	3.3	8.5	9.9	8.8	8.8
60°	2.6	8.1	8.8	7.7	8.1
62.5°	2.2	7.7	8.1	7.4	7.4
65°	1.8	7.4	7.0	6.6	7.0
67.5°	1.5	6.6	6.6	6.2	6.2
70°	1.5	6.2	5.9	5.5	5.5
72.5°	1.5	5.5	5.5	5.1	5.1
75°	1.5	5.1	5.1	4.8	4.4
77.5°	1.5	4.4	4.8	4.4	4.0
80°	1.5	4.0	4.4	4.0	3.3
82.5°	1.5	3.7	4.0	3.7	2.9
85°	1.1	3.3	3.7	3.3	2.2
87.5°	1.1	3.3	3.7	2.9	1.8
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	2.79	4.01	3.15	4.32	4.64	3.82	5.03	4.18	5.35	5.66
	3H	4.11	5.19	4.49	5.53	5.89	5.84	6.92	6.22	7.25	7.62
	4H	4.68	5.69	5.09	6.05	6.43	6.79	7.80	7.20	8.15	8.54
	6H	5.26	6.18	5.67	6.56	6.95	7.73	8.66	8.15	9.03	9.43
	8H	5.59	6.47	6.02	6.86	7.26	8.18	9.06	8.61	9.45	9.86
	12H	5.90	6.74	6.33	7.12	7.55	8.60	9.44	9.03	9.82	10.26
4H	2H	3.75	4.76	4.15	5.11	5.50	4.50	5.51	4.90	5.86	6.25
	3H	5.76	6.59	6.17	6.99	7.40	6.77	7.60	7.19	8.01	8.41
	4H	6.82	7.57	7.26	7.99	8.44	7.93	8.67	8.36	9.09	9.54
	6H	7.70	8.34	8.16	8.79	9.26	9.09	9.73	9.55	10.18	10.65
	8H	8.12	8.72	8.59	9.17	9.64	9.65	10.25	10.12	10.70	11.17
	12H	8.50	9.03	8.99	9.52	9.99	10.19	10.72	10.68	11.21	11.68
8H	4H	7.59	8.20	8.06	8.65	9.12	8.48	9.08	8.95	9.53	10.00
	6H	8.93	9.43	9.43	9.92	10.41	9.92	10.42	10.43	10.92	11.40
	8H	9.65	10.10	10.18	10.62	11.11	10.69	11.13	11.21	11.65	12.14
	12H	10.35	10.74	10.87	11.24	11.81	11.48	11.87	11.99	12.36	12.94
12H	4H	7.75	8.28	8.24	8.77	9.24	8.58	9.12	9.07	9.60	10.08
	6H	9.25	9.69	9.77	10.21	10.70	10.15	10.59	10.67	11.11	11.60
	8H	10.16	10.55	10.68	11.05	11.62	11.06	11.45	11.57	11.95	12.52