

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: P1057810

Luminaire Tested: S122RDRP-S1005D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057810
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-S1005D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

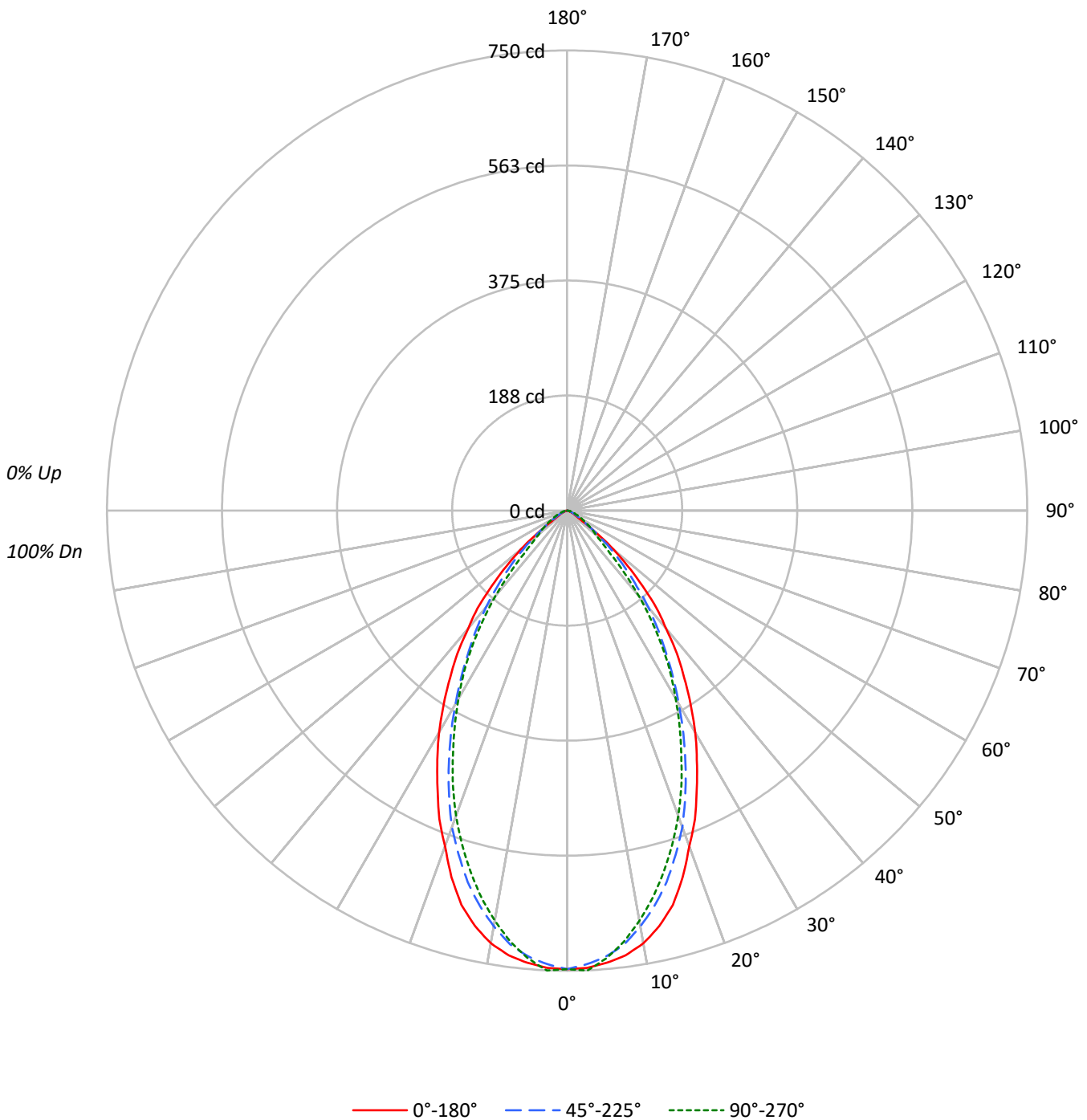
Lumens per Lamp: N/A
Luminaire Lumens: 803.9 lumens
Efficiency: N/A
Efficacy: 19.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64					64			
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59					59			
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54					54			
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50					50			
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13791	13791	13791
5°	13707	13512	13568
10°	13418	12887	12719
15°	12711	11970	11628
20°	11425	10781	10400
25°	10176	9294	8960
30°	8900	7756	7534
35°	7495	6285	6082
40°	6036	4960	4384
45°	4517	3583	2610
50°	2828	2314	1714
55°	959	1248	1393
60°	550	771	1100
65°	393	520	847
70°	324	405	642
75°	214	321	535
80°	159	319	478
85°	0	0	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4517 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	8.6
10°-20°	176.4	21.9
20°-30°	212.3	26.4
30°-40°	181.4	22.6
40°-50°	106.3	13.2
50°-60°	38.5	4.8
60°-70°	13.7	1.7
70°-80°	5.5	0.7
80°-90°	1.0	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°	457.6	56.9
0°-40°	639.0	79.5
0°-60°	783.8	97.5
0°-90°	803.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	803.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	740	742	730	732	732	70
15°	665	655	627	615	609	185
25°	500	479	456	449	440	229
35°	333	307	279	276	270	208
45°	173	155	137	115	100	134
55°	30	42	39	40	43	37
65°	9	10	12	16	19	10
75°	3	4	4	6	8	4
85°	0	0	0	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	747.4	747.4	747.4	747.4	747.4
2.5°	745.9	747.4	740.0	747.4	750.4
5°	740.0	741.5	729.5	732.5	732.5
7.5°	731.0	729.5	713.1	710.1	708.6
10°	716.1	711.6	687.8	683.3	678.8
12.5°	693.7	684.8	659.4	652.0	646.0
15°	665.4	654.9	626.6	614.7	608.7
17.5°	626.6	614.7	587.8	575.9	569.9
20°	581.8	569.9	549.0	535.6	529.6
22.5°	544.5	525.1	502.8	493.8	486.4
25°	499.8	478.9	456.5	449.1	440.1
27.5°	458.0	432.6	410.3	404.3	396.8
30°	417.7	390.9	364.0	364.0	353.6
32.5°	374.5	349.1	320.8	319.3	313.3
35°	332.7	307.3	279.0	276.0	270.0
37.5°	293.9	268.5	241.7	232.7	225.3
40°	250.6	228.3	205.9	191.0	182.0
42.5°	216.3	191.0	168.6	150.7	138.7
45°	173.1	155.2	137.3	114.9	100.0
47.5°	134.3	122.3	107.4	82.1	74.6
50°	98.5	92.5	80.6	61.2	59.7
52.5°	62.7	65.6	58.2	47.7	52.2
55°	29.8	41.8	38.8	40.3	43.3
57.5°	19.4	20.9	28.3	32.8	35.8
60°	14.9	14.9	20.9	26.9	29.8
62.5°	11.9	11.9	16.4	22.4	23.9
65°	9.0	10.4	11.9	16.4	19.4
67.5°	7.5	7.5	9.0	13.4	14.9
70°	6.0	6.0	7.5	10.4	11.9
72.5°	4.5	4.5	6.0	9.0	9.0
75°	3.0	4.5	4.5	6.0	7.5
77.5°	3.0	3.0	3.0	4.5	6.0
80°	1.5	1.5	3.0	3.0	4.5
82.5°	1.5	1.5	1.5	1.5	3.0
85°	0.0	0.0	0.0	1.5	1.5
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	5.00	6.17	5.37	6.48	6.79	8.39	9.56	8.76	9.87	10.18
	3H	5.53	6.55	5.91	6.88	7.25	9.12	10.14	9.50	10.47	10.84
	4H	5.67	6.61	6.07	6.97	7.35	9.34	10.29	9.74	10.64	11.03
	6H	5.74	6.61	6.16	6.98	7.38	9.49	10.36	9.91	10.73	11.13
	8H	5.75	6.56	6.18	6.96	7.36	9.53	10.34	9.96	10.73	11.14
	12H	5.71	6.49	6.15	6.88	7.31	9.53	10.31	9.96	10.69	11.12
4H	2H	5.31	6.26	5.71	6.61	7.00	8.36	9.31	8.76	9.66	10.05
	3H	5.98	6.74	6.39	7.15	7.56	9.23	10.00	9.65	10.41	10.81
	4H	6.22	6.90	6.66	7.33	7.77	9.52	10.20	9.96	10.62	11.07
	6H	6.34	6.93	6.81	7.38	7.85	9.75	10.33	10.21	10.78	11.25
	8H	6.36	6.90	6.83	7.35	7.83	9.79	10.34	10.27	10.79	11.26
	12H	6.32	6.80	6.81	7.29	7.76	9.81	10.29	10.30	10.78	11.25
8H	4H	6.33	6.87	6.80	7.32	7.80	9.45	10.00	9.92	10.45	10.92
	6H	6.50	6.94	7.00	7.44	7.92	9.71	10.16	10.22	10.66	11.14
	8H	6.54	6.94	7.07	7.46	7.95	9.78	10.17	10.30	10.69	11.19
	12H	6.52	6.87	7.04	7.36	7.94	9.84	10.19	10.36	10.68	11.26
12H	4H	6.31	6.79	6.80	7.28	7.75	9.40	9.88	9.89	10.37	10.84
	6H	6.50	6.89	7.02	7.41	7.90	9.66	10.06	10.19	10.58	11.07
	8H	6.57	6.92	7.09	7.41	7.99	9.75	10.10	10.27	10.60	11.17