

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: P1057801

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057801
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-S1005D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

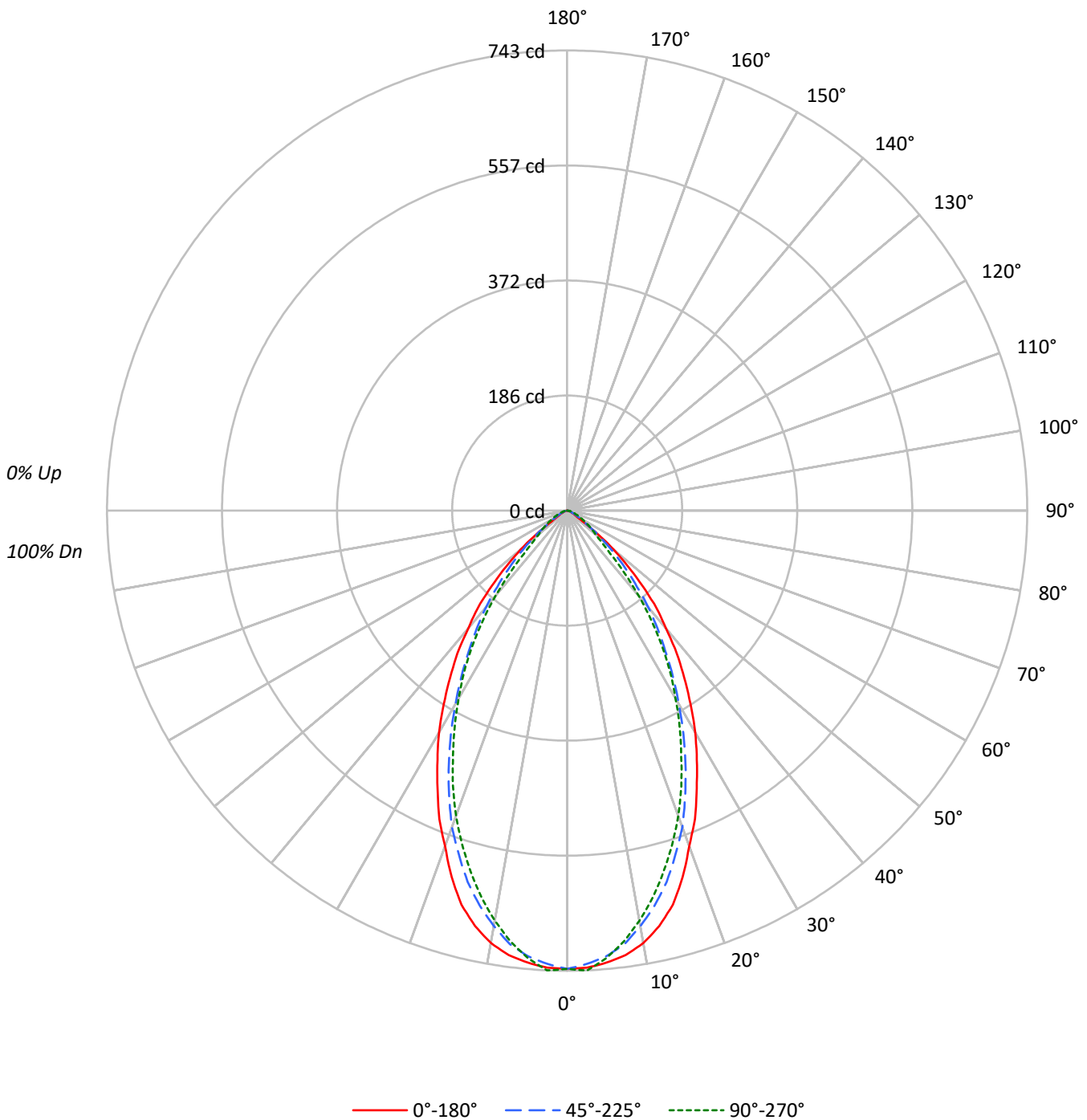
Lumens per Lamp: N/A
Luminaire Lumens: 796.0 lumens
Efficiency: N/A
Efficacy: 19.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	13657	13657	13657
5°	13572	13381	13437
10°	13286	12760	12595
15°	12587	11854	11514
20°	11315	10676	10297
25°	10076	9205	8873
30°	8813	7681	7460
35°	7420	6224	6024
40°	5979	4912	4341
45°	4473	3546	2583
50°	2799	2291	1697
55°	949	1235	1377
60°	546	764	1089
65°	389	515	838
70°	318	399	637
75°	214	314	528
80°	159	319	468
85°	0	0	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4473 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	8.6
10°-20°	174.6	21.9
20°-30°	210.3	26.4
30°-40°	179.6	22.6
40°-50°	105.3	13.2
50°-60°	38.1	4.8
60°-70°	13.5	1.7
70°-80°	5.4	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°	453.1	56.9
0°-40°	632.8	79.5
0°-60°	776.1	97.5
0°-90°	796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	733	734	722	725	725	69
15°	659	648	620	609	603	183
25°	495	474	452	445	436	227
35°	329	304	276	273	267	206
45°	171	154	136	114	99	132
55°	30	41	38	40	43	37
65°	9	10	12	16	19	9
75°	3	4	4	6	7	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°	740.1	740.1	740.1	740.1	740.1
2.5°	738.7	740.1	732.7	740.1	743.1
5°	732.7	734.2	722.4	725.4	725.4
7.5°	723.9	722.4	706.2	703.2	701.7
10°	709.1	704.7	681.0	676.6	672.2
12.5°	686.9	678.1	653.0	645.6	639.7
15°	658.9	648.5	620.5	608.7	602.7
17.5°	620.5	608.7	582.1	570.2	564.3
20°	576.2	564.3	543.7	530.4	524.4
22.5°	539.2	520.0	497.9	489.0	481.6
25°	494.9	474.2	452.1	444.7	435.8
27.5°	453.5	428.4	406.3	400.4	393.0
30°	413.6	387.1	360.5	360.5	350.1
32.5°	370.8	345.7	317.6	316.1	310.2
35°	329.4	304.3	276.3	273.3	267.4
37.5°	291.0	265.9	239.3	230.5	223.1
40°	248.2	226.0	203.9	189.1	180.2
42.5°	214.2	189.1	166.9	149.2	137.4
45°	171.4	153.6	135.9	113.8	99.0
47.5°	133.0	121.1	106.4	81.3	73.9
50°	97.5	91.6	79.8	60.6	59.1
52.5°	62.0	65.0	57.6	47.3	51.7
55°	29.5	41.4	38.4	39.9	42.8
57.5°	19.2	20.7	28.1	32.5	35.5
60°	14.8	14.8	20.7	26.6	29.5
62.5°	11.8	11.8	16.3	22.2	23.6
65°	8.9	10.3	11.8	16.3	19.2
67.5°	7.4	7.4	8.9	13.3	14.8
70°	5.9	5.9	7.4	10.3	11.8
72.5°	4.4	4.4	5.9	8.9	8.9
75°	3.0	4.4	4.4	5.9	7.4
77.5°	3.0	3.0	3.0	4.4	5.9
80°	1.5	1.5	3.0	3.0	4.4
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	4.97	6.13	5.34	6.45	6.76	8.36	9.53	8.73	9.84	10.15
	3H	5.49	6.51	5.87	6.85	7.21	9.09	10.11	9.47	10.45	10.81
	4H	5.63	6.57	6.03	6.93	7.31	9.31	10.26	9.71	10.61	11.00
	6H	5.70	6.57	6.12	6.94	7.34	9.46	10.33	9.88	10.70	11.09
	8H	5.71	6.53	6.14	6.92	7.33	9.49	10.31	9.92	10.70	11.11
	12H	5.68	6.46	6.11	6.84	7.27	9.49	10.27	9.93	10.66	11.09
4H	2H	5.28	6.23	5.68	6.58	6.96	8.33	9.28	8.74	9.63	10.02
	3H	5.94	6.70	6.35	7.11	7.52	9.21	9.97	9.62	10.38	10.78
	4H	6.18	6.86	6.61	7.28	7.73	9.49	10.17	9.92	10.59	11.04
	6H	6.30	6.89	6.77	7.34	7.81	9.71	10.30	10.18	10.74	11.22
	8H	6.32	6.86	6.79	7.31	7.79	9.76	10.30	10.23	10.75	11.23
	12H	6.29	6.76	6.77	7.25	7.73	9.78	10.26	10.27	10.74	11.22
8H	4H	6.28	6.83	6.76	7.28	7.75	9.42	9.96	9.89	10.41	10.89
	6H	6.46	6.90	6.96	7.40	7.88	9.68	10.12	10.18	10.62	11.10
	8H	6.51	6.90	7.03	7.42	7.92	9.74	10.14	10.27	10.66	11.15
	12H	6.48	6.83	7.00	7.33	7.90	9.80	10.15	10.32	10.65	11.23
12H	4H	6.27	6.75	6.76	7.23	7.71	9.37	9.85	9.86	10.33	10.81
	6H	6.46	6.85	6.99	7.37	7.87	9.63	10.02	10.16	10.54	11.04
	8H	6.53	6.88	7.05	7.38	7.95	9.72	10.06	10.23	10.56	11.14