

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: P1058017

Luminaire Tested: S122RDRP-S485D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058017
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-S485D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

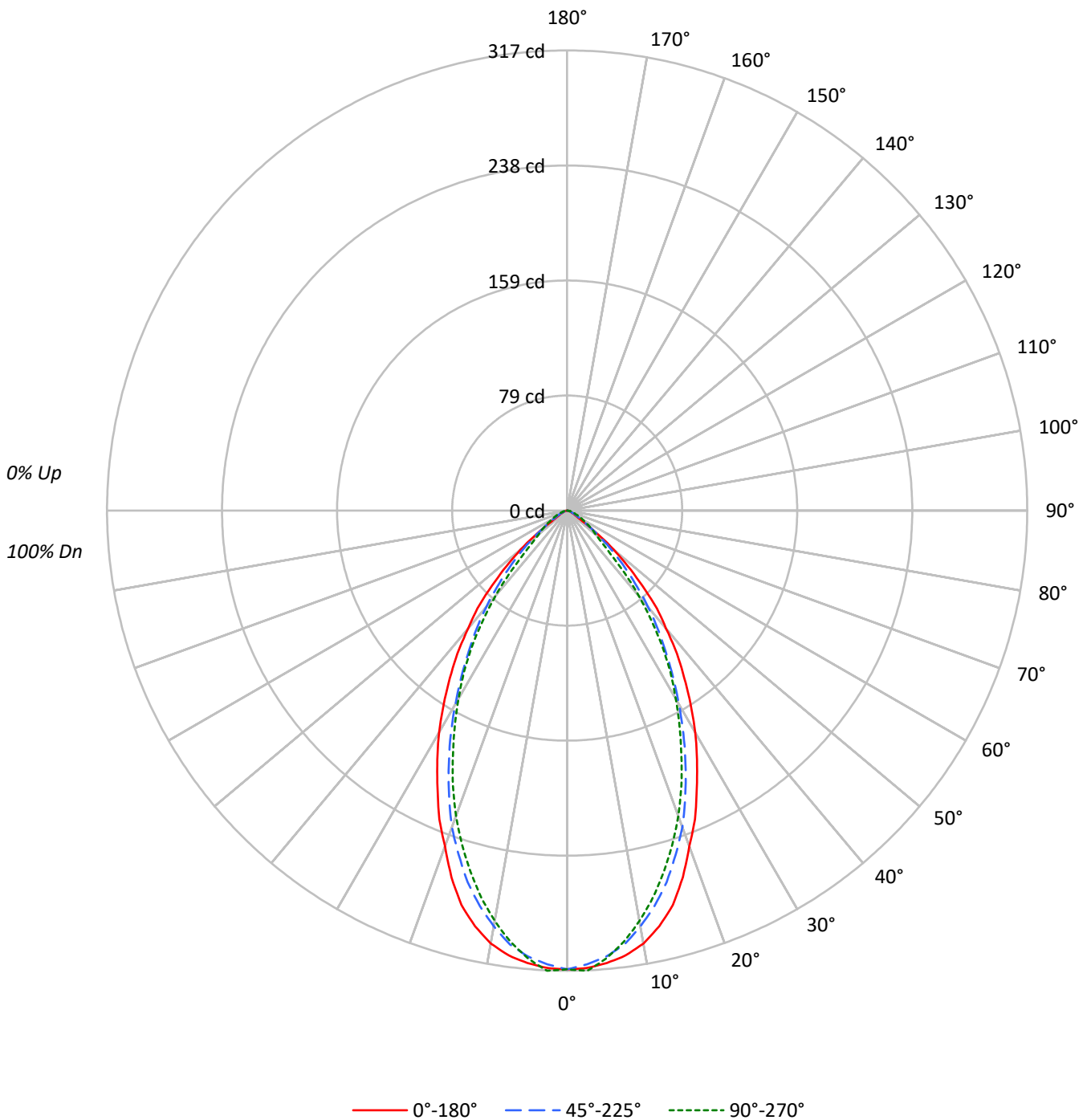
Lumens per Lamp: N/A
Luminaire Lumens: 339.9 lumens
Efficiency: N/A
Efficacy: 17.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	5831	5831	5831
5°	5796	5712	5737
10°	5674	5449	5378
15°	5374	5060	4917
20°	4831	4558	4397
25°	4302	3929	3789
30°	3763	3279	3185
35°	3169	2658	2573
40°	2553	2096	1855
45°	1910	1514	1104
50°	1194	979	723
55°	405	528	589
60°	233	325	465
65°	166	218	358
70°	135	173	270
75°	93	135	228
80°	64	138	202
85°	0	0	127

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1910 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.1	8.6
10°-20°	74.6	21.9
20°-30°	89.8	26.4
30°-40°	76.7	22.6
40°-50°	44.9	13.2
50°-60°	16.3	4.8
60°-70°	5.8	1.7
70°-80°	2.3	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°	193.5	56.9
0°-40°	270.2	79.5
0°-60°	331.4	97.5
0°-90°	339.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	339.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	313	314	308	310	310	30
15°	281	277	265	260	257	78
25°	211	202	193	190	186	97
35°	141	130	118	117	114	88
45°	73	66	58	49	42	56
55°	13	18	16	17	18	16
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°	316.0	316.0	316.0	316.0	316.0
2.5°	315.4	316.0	312.9	316.0	317.3
5°	312.9	313.5	308.4	309.7	309.7
7.5°	309.1	308.4	301.5	300.2	299.6
10°	302.8	300.9	290.8	288.9	287.0
12.5°	293.3	289.5	278.8	275.6	273.1
15°	281.3	276.9	264.9	259.9	257.4
17.5°	264.9	259.9	248.5	243.5	241.0
20°	246.0	241.0	232.1	226.4	223.9
22.5°	230.2	222.0	212.6	208.8	205.6
25°	211.3	202.5	193.0	189.9	186.1
27.5°	193.6	182.9	173.5	170.9	167.8
30°	176.6	165.3	153.9	153.9	149.5
32.5°	158.3	147.6	135.6	135.0	132.5
35°	140.7	129.9	118.0	116.7	114.2
37.5°	124.3	113.5	102.2	98.4	95.2
40°	106.0	96.5	87.0	80.7	77.0
42.5°	91.5	80.7	71.3	63.7	58.7
45°	73.2	65.6	58.0	48.6	42.3
47.5°	56.8	51.7	45.4	34.7	31.5
50°	41.6	39.1	34.1	25.9	25.2
52.5°	26.5	27.8	24.6	20.2	22.1
55°	12.6	17.7	16.4	17.0	18.3
57.5°	8.2	8.8	12.0	13.9	15.1
60°	6.3	6.3	8.8	11.4	12.6
62.5°	5.0	5.0	6.9	9.5	10.1
65°	3.8	4.4	5.0	6.9	8.2
67.5°	3.2	3.2	3.8	5.7	6.3
70°	2.5	2.5	3.2	4.4	5.0
72.5°	1.9	1.9	2.5	3.8	3.8
75°	1.3	1.9	1.9	2.5	3.2
77.5°	1.3	1.3	1.3	1.9	2.5
80°	0.6	0.6	1.3	1.3	1.9
82.5°	0.6	0.6	0.6	0.6	1.3
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	1.99	3.15	2.36	3.46	3.78	5.41	6.58	5.78	6.89	7.20
	3H	2.52	3.54	2.90	3.87	4.24	6.14	7.16	6.52	7.49	7.86
	4H	2.66	3.61	3.07	3.96	4.35	6.36	7.31	6.76	7.66	8.04
	6H	2.74	3.61	3.16	3.98	4.38	6.51	7.37	6.92	7.75	8.14
	8H	2.74	3.56	3.17	3.95	4.36	6.54	7.36	6.97	7.75	8.16
	12H	2.70	3.48	3.14	3.87	4.30	6.54	7.32	6.97	7.70	8.14
4H	2H	2.29	3.24	2.70	3.59	3.98	5.38	6.32	5.78	6.68	7.06
	3H	2.96	3.73	3.38	4.14	4.54	6.25	7.02	6.66	7.42	7.83
	4H	3.21	3.90	3.65	4.32	4.76	6.53	7.21	6.97	7.64	8.08
	6H	3.34	3.92	3.80	4.37	4.84	6.76	7.34	7.22	7.79	8.26
	8H	3.34	3.89	3.82	4.34	4.81	6.80	7.35	7.28	7.80	8.27
	12H	3.31	3.78	3.80	4.27	4.75	6.82	7.30	7.31	7.79	8.26
8H	4H	3.32	3.87	3.80	4.32	4.79	6.46	7.01	6.94	7.46	7.93
	6H	3.49	3.93	4.00	4.43	4.92	6.73	7.17	7.23	7.67	8.15
	8H	3.53	3.92	4.06	4.44	4.94	6.79	7.18	7.32	7.70	8.20
	12H	3.50	3.85	4.02	4.35	4.92	6.84	7.19	7.36	7.69	8.26
12H	4H	3.31	3.79	3.80	4.27	4.75	6.42	6.89	6.90	7.38	7.86
	6H	3.49	3.89	4.02	4.41	4.90	6.68	7.07	7.20	7.59	8.09
	8H	3.55	3.90	4.07	4.40	4.97	6.76	7.11	7.28	7.61	8.18