

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058240

Luminaire Tested: S122RDR-H1005D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058240
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: S122RDR-H1005D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

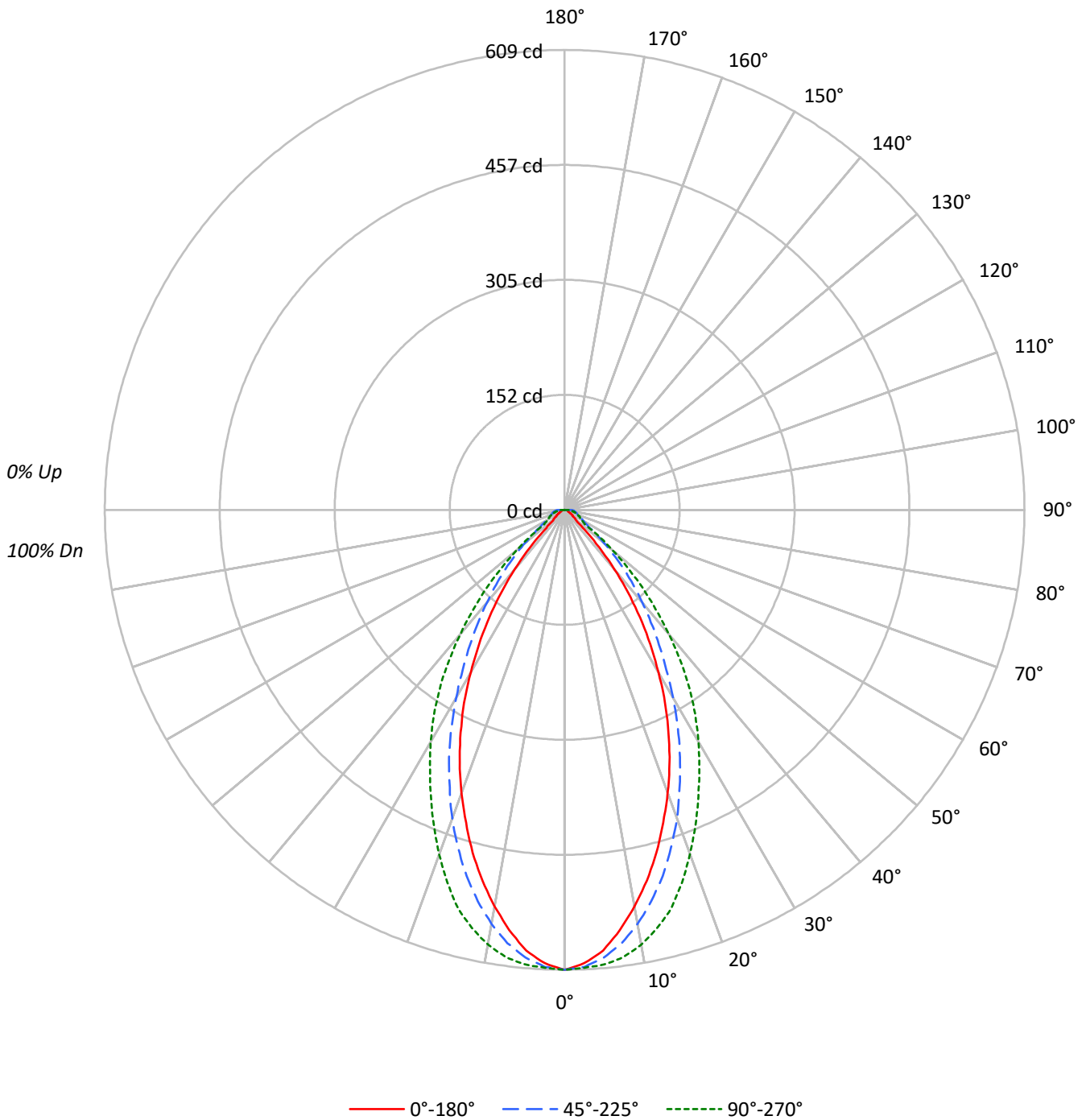
Lumens per Lamp: N/A
Luminaire Lumens: 656.5 lumens
Efficiency: N/A
Efficacy: 18.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): 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	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°	11239	11239	11239
5°	10849	11023	11195
10°	9991	10429	10954
15°	8982	9584	10432
20°	7837	8546	9532
25°	6627	7364	8529
30°	5295	6115	7558
35°	3917	4915	6492
40°	2474	3852	5172
45°	973	2891	3807
50°	502	1943	2345
55°	412	1277	1052
60°	303	1033	948
65°	253	969	969
70°	254	1009	944
75°	335	1162	998
80°	499	1488	1116
85°	741	2477	1482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4949 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	8.5
10°-20°	140.7	21.4
20°-30°	167.2	25.5
30°-40°	139.1	21.2
40°-50°	77.7	11.8
50°-60°	31.4	4.8
60°-70°	20.1	3.1
70°-80°	15.1	2.3
80°-90°	9.6	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°	363.6	55.4
0°-40°	502.7	76.6
0°-60°	611.8	93.2
0°-90°	656.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	656.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	609	609	609	609	609	
5°	586	596	595	600	604	54
15°	470	484	502	527	546	131
25°	326	338	362	390	419	148
35°	174	190	218	254	288	108
45°	37	63	111	130	146	35
55°	13	27	40	38	33	11
65°	6	23	22	21	22	6
75°	5	16	16	15	14	5
85°	4	10	12	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	609.1	609.1	609.1	609.1	609.1
2.5°	600.9	610.2	605.6	605.6	606.7
5°	585.7	596.2	595.1	599.7	604.4
7.5°	561.2	572.9	578.7	589.2	597.4
10°	533.2	546.1	556.6	572.9	584.6
12.5°	502.9	515.7	530.9	551.9	567.1
15°	470.2	484.2	501.7	527.4	546.1
17.5°	434.1	449.2	469.1	497.1	516.9
20°	399.1	414.2	435.2	463.2	485.4
22.5°	362.9	375.7	397.9	425.9	452.7
25°	325.5	338.4	361.7	389.7	418.9
27.5°	288.2	301.0	324.4	353.5	386.2
30°	248.5	262.5	287.0	319.7	354.7
32.5°	211.2	225.2	250.9	287.0	322.0
35°	173.9	190.2	218.2	254.4	288.2
37.5°	137.7	156.4	187.9	221.7	252.0
40°	102.7	122.5	159.9	189.0	214.7
42.5°	67.7	91.0	134.2	158.7	178.5
45°	37.3	63.0	110.8	129.5	145.9
47.5°	21.0	40.8	87.5	102.7	112.0
50°	17.5	30.3	67.7	78.2	81.7
52.5°	14.0	28.0	51.3	57.2	54.8
55°	12.8	26.8	39.7	38.5	32.7
57.5°	10.5	26.8	31.5	28.0	28.0
60°	8.2	25.7	28.0	24.5	25.7
62.5°	7.0	24.5	25.7	23.3	23.3
65°	5.8	23.3	22.2	21.0	22.2
67.5°	4.7	21.0	21.0	19.8	19.8
70°	4.7	19.8	18.7	17.5	17.5
72.5°	4.7	17.5	17.5	16.3	16.3
75°	4.7	16.3	16.3	15.2	14.0
77.5°	4.7	14.0	15.2	14.0	12.8
80°	4.7	12.8	14.0	12.8	10.5
82.5°	4.7	11.7	12.8	11.7	9.3
85°	3.5	10.5	11.7	10.5	7.0
87.5°	3.5	10.5	11.7	9.3	5.8
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	6.76	7.98	7.13	8.30	8.61	7.85	9.06	8.21	9.38	9.69
	3H	8.10	9.18	8.48	9.52	9.88	9.87	10.96	10.25	11.29	11.65
	4H	8.68	9.69	9.08	10.04	10.42	10.83	11.84	11.23	12.19	12.57
	6H	9.25	10.18	9.66	10.55	10.94	11.77	12.70	12.19	13.07	13.47
	8H	9.58	10.45	10.01	10.85	11.25	12.22	13.10	12.65	13.49	13.90
	12H	9.88	10.72	10.32	11.11	11.54	12.64	13.48	13.08	13.87	14.30
4H	2H	7.73	8.74	8.14	9.09	9.48	8.53	9.54	8.93	9.89	10.27
	3H	9.76	10.59	10.17	11.00	11.40	10.80	11.64	11.22	12.04	12.45
	4H	10.84	11.59	11.28	12.01	12.45	11.95	12.70	12.39	13.12	13.57
	6H	11.71	12.36	12.18	12.81	13.28	13.12	13.77	13.59	14.22	14.68
	8H	12.13	12.73	12.60	13.18	13.65	13.68	14.29	14.15	14.74	15.21
	12H	12.51	13.04	13.00	13.53	14.00	14.23	14.76	14.71	15.25	15.72
8H	4H	11.61	12.22	12.08	12.67	13.14	12.51	13.11	12.98	13.56	14.03
	6H	12.95	13.45	13.46	13.95	14.43	13.96	14.45	14.46	14.95	15.43
	8H	13.67	14.12	14.20	14.63	15.13	14.72	15.17	15.24	15.68	16.18
	12H	14.36	14.76	14.88	15.25	15.83	15.51	15.90	16.02	16.40	16.97
12H	4H	11.77	12.30	12.25	12.79	13.26	12.61	13.15	13.10	13.63	14.11
	6H	13.27	13.72	13.80	14.24	14.73	14.18	14.63	14.71	15.15	15.64
	8H	14.18	14.57	14.69	15.07	15.64	15.09	15.48	15.61	15.98	16.55