

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: P1057853

Luminaire Tested: S122RDRP-S1005D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057853
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-S1005D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

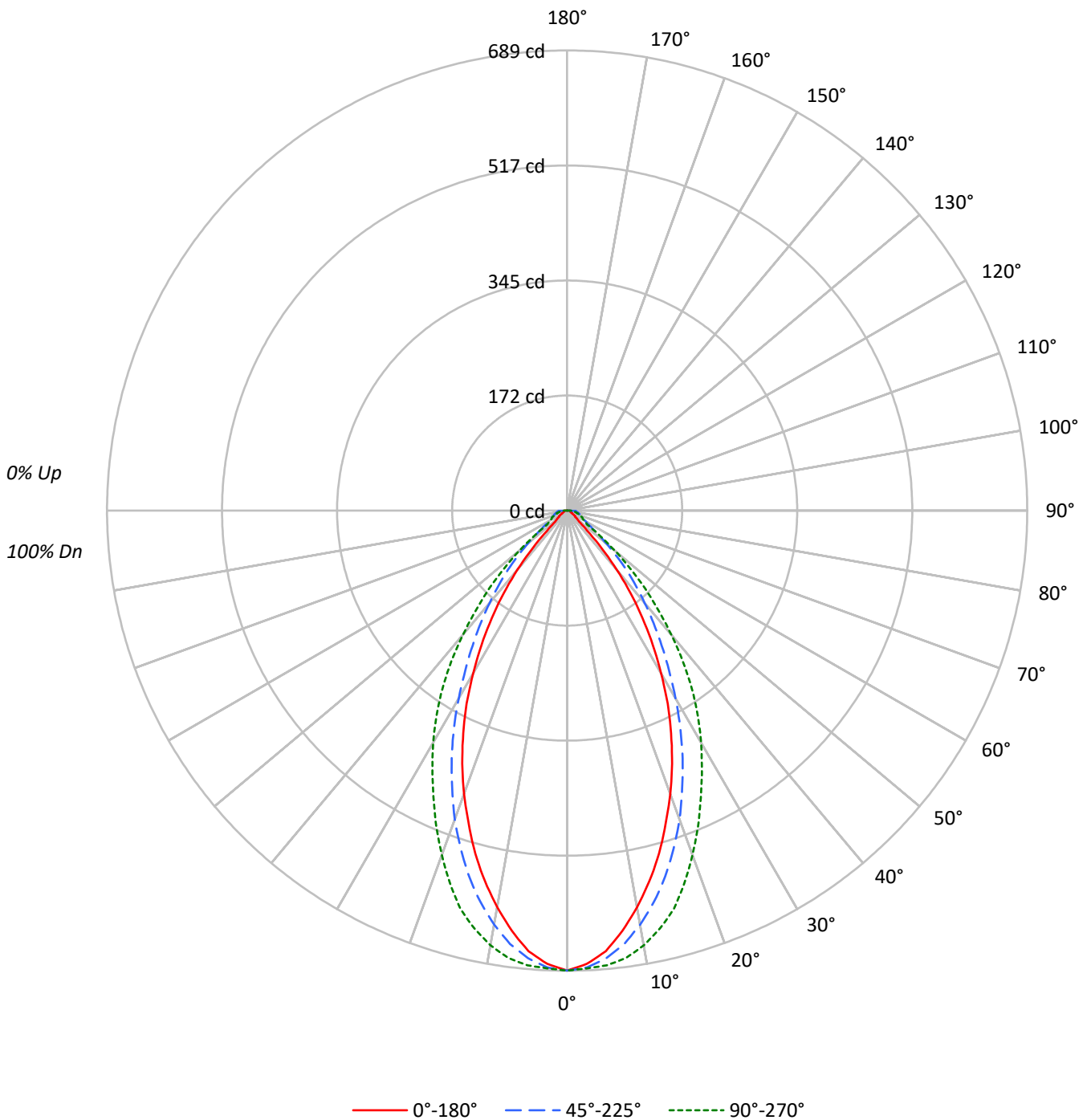
Lumens per Lamp: N/A
Luminaire Lumens: 742.3 lumens
Efficiency: N/A
Efficacy: 17.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	12708	12708	12708
5°	12268	12462	12659
10°	11297	11791	12385
15°	10157	10837	11794
20°	8860	9663	10777
25°	7495	8327	9643
30°	5987	6914	8546
35°	4429	5557	7341
40°	2797	4353	5846
45°	1101	3270	4303
50°	568	2196	2650
55°	466	1444	1187
60°	340	1170	1070
65°	288	1096	1096
70°	286	1138	1068
75°	378	1319	1126
80°	563	1679	1265
85°	847	2795	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5584 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	8.5
10°-20°	159.1	21.4
20°-30°	189.1	25.5
30°-40°	157.3	21.2
40°-50°	87.8	11.8
50°-60°	35.5	4.8
60°-70°	22.7	3.1
70°-80°	17.0	2.3
80°-90°	10.9	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°	411.2	55.4
0°-40°	568.4	76.6
0°-60°	691.7	93.2
0°-90°	742.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	742.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	662	674	673	678	683	61
15°	532	548	567	596	617	148
25°	368	383	409	441	474	168
35°	197	215	247	288	326	122
45°	42	71	125	146	165	40
55°	14	30	45	44	37	13
65°	7	26	25	24	25	7
75°	5	18	18	17	16	6
85°	4	12	13	12	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.7	688.7	688.7	688.7	688.7
2.5°	679.4	690.0	684.7	684.7	686.0
5°	662.3	674.2	672.8	678.1	683.4
7.5°	634.6	647.8	654.4	666.2	675.5
10°	602.9	617.4	629.3	647.8	661.0
12.5°	568.6	583.1	600.3	624.0	641.2
15°	531.7	547.5	567.3	596.3	617.4
17.5°	490.8	507.9	530.4	562.0	584.4
20°	451.2	468.3	492.1	523.8	548.8
22.5°	410.3	424.8	449.9	481.5	511.9
25°	368.1	382.6	409.0	440.6	473.6
27.5°	325.9	340.4	366.8	399.7	436.7
30°	281.0	296.8	324.5	361.5	401.1
32.5°	238.8	254.6	283.6	324.5	364.1
35°	196.6	215.0	246.7	287.6	325.9
37.5°	155.7	176.8	212.4	250.7	285.0
40°	116.1	138.5	180.7	213.7	242.7
42.5°	76.5	102.9	151.7	179.4	201.9
45°	42.2	71.2	125.3	146.4	164.9
47.5°	23.7	46.2	98.9	116.1	126.7
50°	19.8	34.3	76.5	88.4	92.3
52.5°	15.8	31.7	58.0	64.6	62.0
55°	14.5	30.3	44.9	43.5	36.9
57.5°	11.9	30.3	35.6	31.7	31.7
60°	9.2	29.0	31.7	27.7	29.0
62.5°	7.9	27.7	29.0	26.4	26.4
65°	6.6	26.4	25.1	23.7	25.1
67.5°	5.3	23.7	23.7	22.4	22.4
70°	5.3	22.4	21.1	19.8	19.8
72.5°	5.3	19.8	19.8	18.5	18.5
75°	5.3	18.5	18.5	17.2	15.8
77.5°	5.3	15.8	17.2	15.8	14.5
80°	5.3	14.5	15.8	14.5	11.9
82.5°	5.3	13.2	14.5	13.2	10.6
85°	4.0	11.9	13.2	11.9	7.9
87.5°	4.0	11.9	13.2	10.6	6.6
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	7.19	8.41	7.56	8.72	9.04	8.28	9.50	8.65	9.81	10.13
	3H	8.52	9.61	8.91	9.94	10.30	10.31	11.39	10.69	11.72	12.09
	4H	9.10	10.11	9.51	10.46	10.85	11.26	12.27	11.66	12.62	13.01
	6H	9.67	10.60	10.09	10.97	11.37	12.21	13.14	12.62	13.51	13.90
	8H	10.00	10.88	10.43	11.27	11.67	12.66	13.54	13.09	13.93	14.33
	12H	10.31	11.15	10.74	11.53	11.96	13.08	13.92	13.51	14.30	14.74
4H	2H	8.16	9.17	8.56	9.52	9.91	8.96	9.97	9.36	10.32	10.70
	3H	10.19	11.02	10.60	11.42	11.83	11.24	12.07	11.65	12.47	12.88
	4H	11.27	12.02	11.71	12.44	12.88	12.39	13.13	12.82	13.55	14.00
	6H	12.14	12.79	12.61	13.24	13.70	13.55	14.20	14.02	14.65	15.12
	8H	12.55	13.16	13.03	13.61	14.08	14.12	14.72	14.59	15.17	15.64
	12H	12.94	13.47	13.43	13.96	14.43	14.66	15.20	15.15	15.68	16.16
8H	4H	12.04	12.65	12.51	13.10	13.57	12.94	13.54	13.41	13.99	14.46
	6H	13.38	13.88	13.88	14.38	14.86	14.39	14.88	14.89	15.38	15.86
	8H	14.10	14.54	14.62	15.06	15.55	15.15	15.60	15.68	16.12	16.61
	12H	14.79	15.19	15.31	15.68	16.26	15.94	16.34	16.46	16.83	17.40
12H	4H	12.20	12.73	12.69	13.22	13.69	13.04	13.58	13.53	14.06	14.54
	6H	13.70	14.15	14.23	14.66	15.16	14.61	15.06	15.14	15.58	16.07
	8H	14.61	15.00	15.12	15.49	16.07	15.52	15.92	16.04	16.41	16.98