

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: P1060532

Luminaire Tested: S124RDRP-S575D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060532  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S575D940-X4F0-XX-UDD-WVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

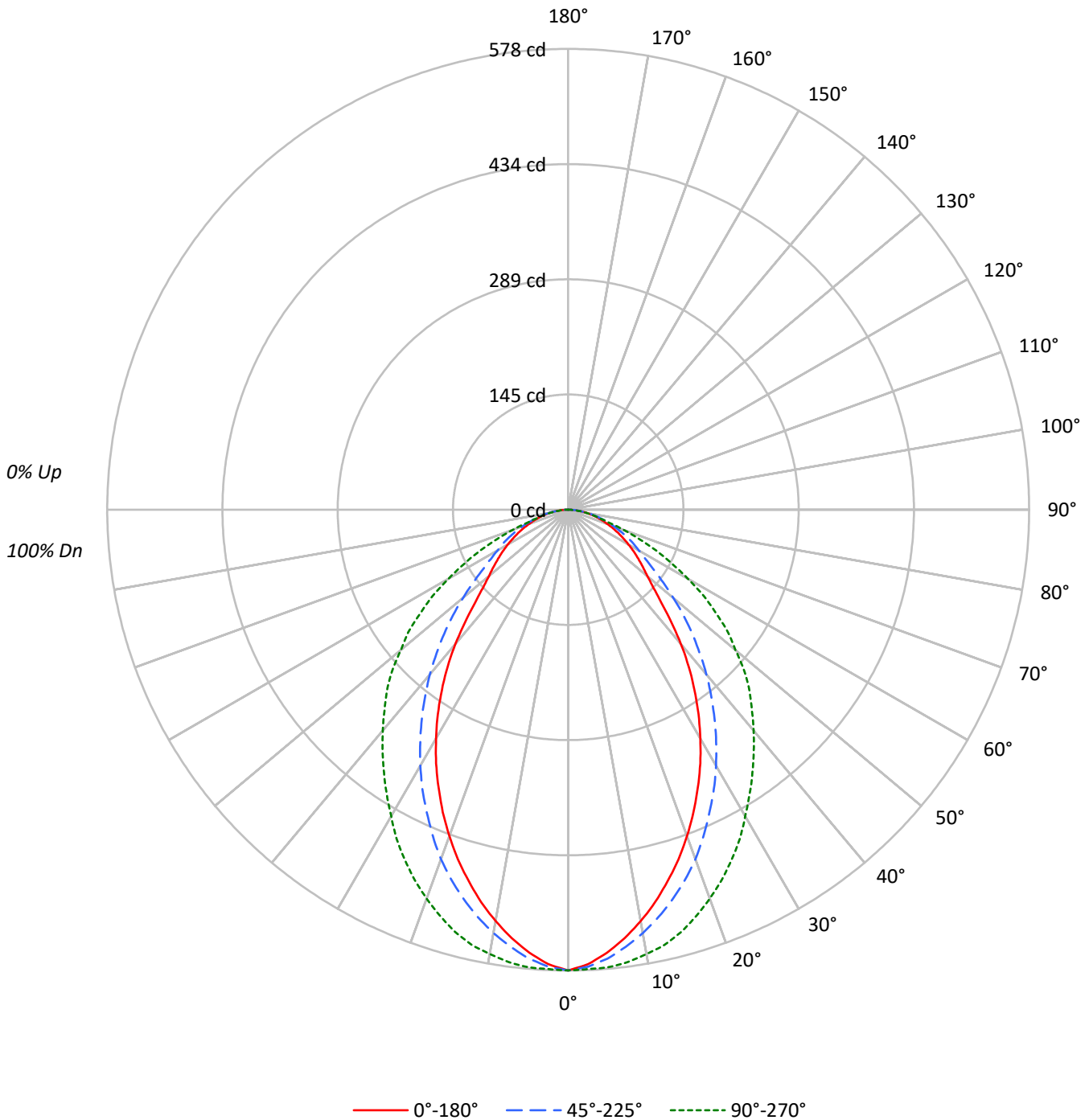
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1052.1 lumens  
Efficiency: N/A  
Efficacy: 53.7 lumens/watt  
Spacing Criteria (0/90/45): 0.92 / 1.15 / 1.1  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4976	4976	4976
5°	4823	4886	4980
10°	4582	4714	4947
15°	4299	4509	4887
20°	3991	4274	4757
25°	3654	3983	4604
30°	3294	3686	4415
35°	2903	3362	4234
40°	2472	3031	4065
45°	2007	2678	3916
50°	1736	2304	3668
55°	1609	1955	3400
60°	1502	1764	2983
65°	1408	1655	2482
70°	1312	1526	1876
75°	1251	1411	1351
80°	1170	1289	1141
85°	1077	1196	899

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3916 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.4	5.1
10°-20°	143.4	13.6
20°-30°	195.8	18.6
30°-40°	205.2	19.5
40°-50°	177.6	16.9
50°-60°	133.4	12.7
60°-70°	86.0	8.2
70°-80°	44.1	4.2
80°-90°	13.2	1.3
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°	392.6	37.3
0°-40°	597.7	56.8
0°-60°	908.7	86.4
0°-90°	1052.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1052.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	558	566	565	569	576	52
15°	482	494	506	529	548	135
25°	385	399	419	452	485	176
35°	276	292	320	362	403	172
45°	165	182	220	274	322	130
55°	107	111	130	186	226	96
65°	69	70	81	98	122	69
75°	38	42	42	42	41	40
85°	11	13	12	12	9	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	577.9	577.9	577.9	577.9	577.9
2.5°	570.6	577.9	573.6	574.9	576.7
5°	557.9	566.4	565.2	569.4	576.1
7.5°	542.1	551.2	553.0	562.7	572.4
10°	524.0	534.3	539.1	553.6	565.8
12.5°	504.0	514.9	523.4	541.5	559.1
15°	482.2	494.3	505.8	528.8	548.2
17.5°	459.8	471.9	487.0	512.5	534.3
20°	435.5	448.9	466.4	493.1	519.1
22.5°	410.7	424.6	443.4	472.5	502.8
25°	384.6	399.2	419.2	451.9	484.6
27.5°	358.6	373.1	395.6	430.1	465.8
30°	331.3	346.5	370.7	408.3	444.0
32.5°	304.1	320.4	345.3	385.3	423.4
35°	276.2	292.0	319.8	362.2	402.8
37.5°	248.4	264.7	294.4	339.8	382.2
40°	219.9	236.8	269.6	317.4	361.6
42.5°	191.4	209.6	244.1	294.4	341.0
45°	164.8	181.7	219.9	273.8	321.6
47.5°	144.8	156.3	195.7	253.8	299.8
50°	129.6	135.7	172.0	232.0	273.8
52.5°	118.1	122.4	150.2	208.4	252.6
55°	107.2	110.9	130.2	186.0	226.5
57.5°	97.5	99.3	115.1	164.2	201.7
60°	87.2	89.0	102.4	140.5	173.2
62.5°	78.1	79.4	92.1	118.1	147.2
65°	69.1	70.3	81.2	98.1	121.8
67.5°	60.6	62.4	70.9	80.0	96.9
70°	52.1	55.7	60.6	64.8	74.5
72.5°	44.8	48.5	50.9	52.1	52.7
75°	37.6	41.8	42.4	41.8	40.6
77.5°	30.3	33.9	33.9	32.7	31.5
80°	23.6	26.7	26.0	24.8	23.0
82.5°	17.6	19.4	18.8	17.6	15.7
85°	10.9	12.7	12.1	11.5	9.1
87.5°	5.5	7.3	6.7	6.1	3.6
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	12.00	13.49	12.37	13.80	14.12	15.78	17.27	16.15	17.58	17.89
	3H	13.66	14.99	14.04	15.32	15.68	16.90	18.22	17.27	18.55	18.92
	4H	14.33	15.58	14.73	15.93	16.31	17.19	18.43	17.59	18.78	19.16
	6H	14.84	15.99	15.26	16.36	16.75	17.38	18.53	17.80	18.90	19.29
	8H	15.03	16.12	15.45	16.51	16.91	17.44	18.53	17.86	18.92	19.32
	12H	15.15	16.20	15.58	16.58	17.01	17.46	18.51	17.89	18.89	19.32
4H	2H	12.79	14.03	13.19	14.38	14.76	15.94	17.19	16.34	17.54	17.91
	3H	14.65	15.68	15.06	16.08	16.49	17.25	18.29	17.66	18.69	19.09
	4H	15.46	16.39	15.89	16.81	17.25	17.66	18.59	18.09	19.01	19.45
	6H	16.11	16.91	16.57	17.36	17.82	17.98	18.78	18.43	19.23	19.69
	8H	16.34	17.09	16.80	17.54	18.00	18.07	18.82	18.53	19.27	19.73
	12H	16.51	17.18	16.99	17.66	18.13	18.13	18.80	18.61	19.28	19.75
8H	4H	15.81	16.56	16.27	17.01	17.48	17.79	18.55	18.26	18.99	19.46
	6H	16.60	17.23	17.10	17.72	18.20	18.20	18.83	18.70	19.32	19.80
	8H	16.92	17.48	17.44	17.99	18.48	18.36	18.91	18.87	19.43	19.91
	12H	17.19	17.68	17.70	18.18	18.74	18.48	18.97	18.99	19.47	20.03
12H	4H	15.84	16.51	16.32	16.99	17.46	17.80	18.47	18.28	18.95	19.42
	6H	16.66	17.22	17.18	17.74	18.22	18.23	18.79	18.74	19.30	19.79
	8H	17.05	17.55	17.56	18.04	18.61	18.43	18.92	18.94	19.42	19.98