

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: P1060518

Luminaire Tested: S124RDRP-S575D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060518  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S575D935-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

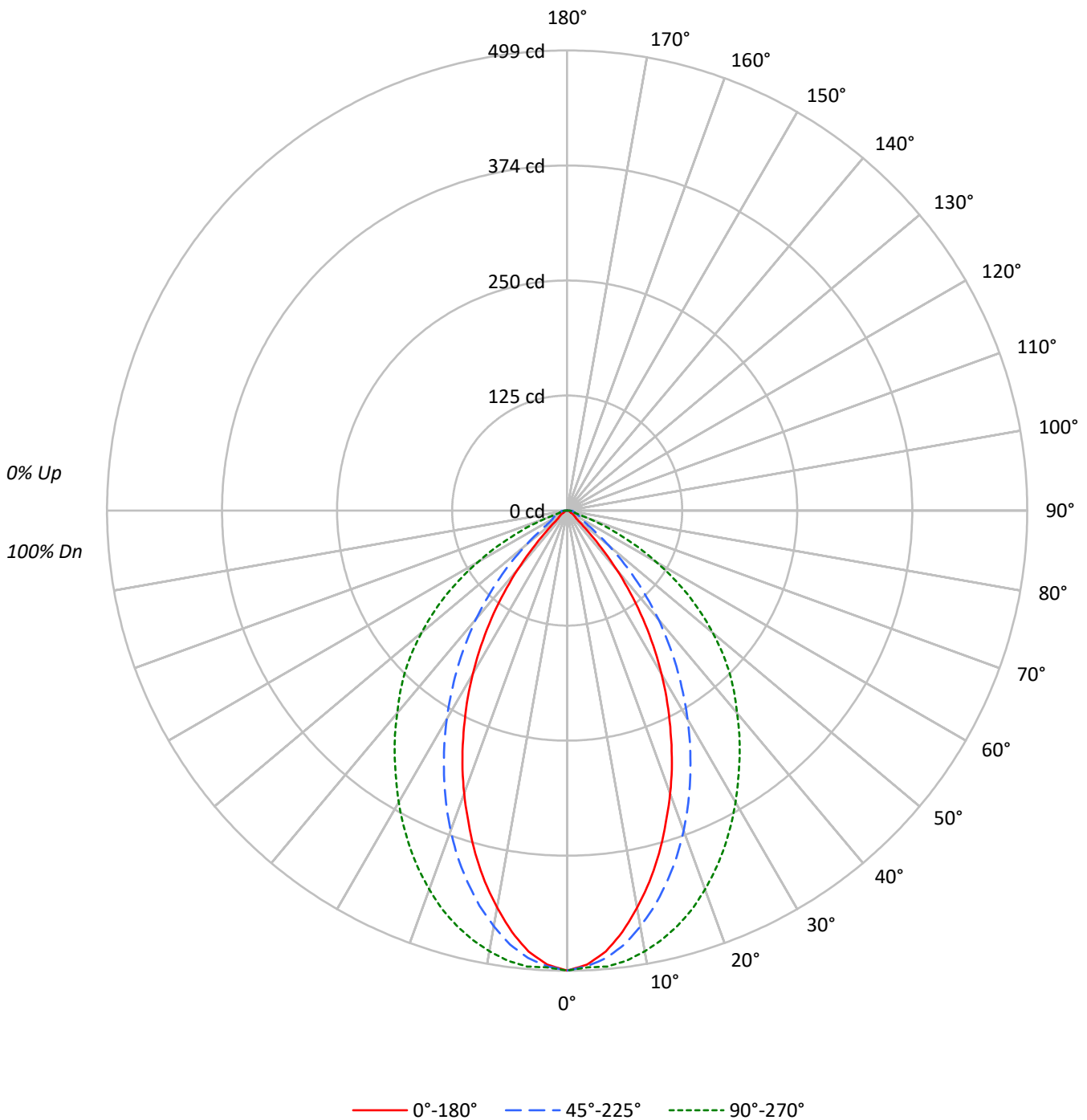
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 628.5 lumens  
Efficiency: N/A  
Efficacy: 32.1 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
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 (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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

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

	0°	45°	90°
0°	4294	4294	4294
5°	4149	4210	4290
10°	3823	4002	4243
15°	3433	3720	4148
20°	2993	3384	4006
25°	2525	3003	3832
30°	2037	2596	3631
35°	1507	2172	3427
40°	934	1730	3224
45°	370	1262	3036
50°	165	792	2760
55°	132	413	2417
60°	91	312	1925
65°	59	310	1324
70°	58	279	619
75°	77	273	273
80°	114	317	317
85°	227	632	464

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3036 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.7	7.3
10°-20°	118.1	18.8
20°-30°	149.0	23.7
30°-40°	136.7	21.8
40°-50°	93.1	14.8
50°-60°	50.7	8.1
60°-70°	21.9	3.5
70°-80°	8.0	1.3
80°-90°	5.2	0.8
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°	312.8	49.8
0°-40°	449.6	71.5
0°-60°	593.4	94.4
0°-90°	628.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	628.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	480	486	487	492	496	44
15°	385	399	417	447	465	107
25°	266	284	316	366	403	121
35°	143	164	207	272	326	89
45°	30	51	104	184	249	28
55°	9	9	28	101	161	8
65°	3	4	15	32	65	3
75°	2	8	8	8	8	2
85°	2	5	6	6	5	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	498.7	498.7	498.7	498.7	498.7
2.5°	492.8	498.7	494.6	495.8	495.8
5°	480.0	486.4	487.0	492.3	496.3
7.5°	460.6	470.0	474.7	485.2	492.3
10°	437.2	448.4	457.7	475.9	485.2
12.5°	412.1	424.9	439.0	463.0	476.4
15°	385.1	398.6	417.3	447.2	465.3
17.5°	355.3	371.7	394.5	430.2	452.4
20°	326.6	343.0	369.3	409.7	437.2
22.5°	296.8	313.7	343.0	388.1	420.8
25°	265.7	284.5	316.1	366.4	403.3
27.5°	235.3	255.2	288.6	343.6	384.6
30°	204.9	224.8	261.1	320.2	365.2
32.5°	173.8	194.3	233.5	295.6	345.3
35°	143.4	164.5	206.6	272.2	326.0
37.5°	112.4	134.6	179.7	249.3	306.7
40°	83.1	105.4	153.9	226.5	286.8
42.5°	55.6	77.8	127.6	204.3	268.1
45°	30.4	50.9	103.6	183.8	249.3
47.5°	16.4	28.1	80.2	163.9	228.3
50°	12.3	15.2	59.1	142.8	206.0
52.5°	10.5	11.7	41.0	120.6	183.8
55°	8.8	9.4	27.5	101.3	161.0
57.5°	7.0	7.6	20.5	81.9	136.4
60°	5.3	6.4	18.1	63.2	111.8
62.5°	4.1	5.3	17.0	46.2	88.4
65°	2.9	4.1	15.2	31.6	65.0
67.5°	2.9	4.7	12.9	20.5	43.9
70°	2.3	6.4	11.1	13.5	24.6
72.5°	2.3	7.0	9.4	9.4	9.4
75°	2.3	7.6	8.2	8.2	8.2
77.5°	2.3	7.0	7.6	7.0	7.0
80°	2.3	6.4	6.4	6.4	6.4
82.5°	2.3	5.9	6.4	6.4	5.3
85°	2.3	5.3	6.4	6.4	4.7
87.5°	1.8	5.3	5.9	5.9	3.5
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	0.00	0.00	0.00	0.00	0.00	13.47	14.75	13.84	15.06	15.38
	3H	0.00	0.00	0.00	0.00	0.00	13.85	14.98	14.23	15.31	15.67
	4H	0.00	0.00	0.00	0.12	0.50	13.82	14.88	14.23	15.23	15.61
	6H	0.00	0.85	0.30	1.22	1.62	13.81	14.78	14.23	15.15	15.54
	8H	0.47	1.39	0.90	1.78	2.18	13.81	14.73	14.24	15.12	15.52
	12H	1.14	2.01	1.57	2.39	2.82	13.83	14.70	14.26	15.08	15.51
4H	2H	0.00	0.76	0.11	1.11	1.50	13.28	14.33	13.68	14.68	15.07
	3H	1.29	2.15	1.70	2.55	2.95	13.70	14.56	14.11	14.96	15.37
	4H	2.58	3.35	3.01	3.77	4.21	13.70	14.47	14.14	14.89	15.33
	6H	3.70	4.36	4.16	4.80	5.27	13.74	14.40	14.20	14.85	15.32
	8H	4.21	4.82	4.68	5.27	5.74	13.77	14.38	14.24	14.83	15.30
	12H	4.75	5.30	5.24	5.78	6.26	13.83	14.38	14.32	14.86	15.34
8H	4H	3.67	4.29	4.14	4.73	5.20	13.61	14.23	14.08	14.67	15.15
	6H	5.20	5.70	5.70	6.20	6.68	13.69	14.19	14.19	14.69	15.17
	8H	6.01	6.47	6.54	6.99	7.48	13.77	14.22	14.29	14.74	15.23
	12H	6.85	7.25	7.37	7.75	8.32	13.94	14.34	14.45	14.84	15.41
12H	4H	3.86	4.40	4.34	4.88	5.36	13.57	14.12	14.06	14.60	15.08
	6H	5.55	6.01	6.08	6.53	7.02	13.66	14.11	14.18	14.63	15.12
	8H	6.57	6.98	7.09	7.47	8.04	13.80	14.20	14.31	14.69	15.26