

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: P1060522

Luminaire Tested: S124RDR-S575D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060522  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D935-X4F0-XX-UDD-WVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

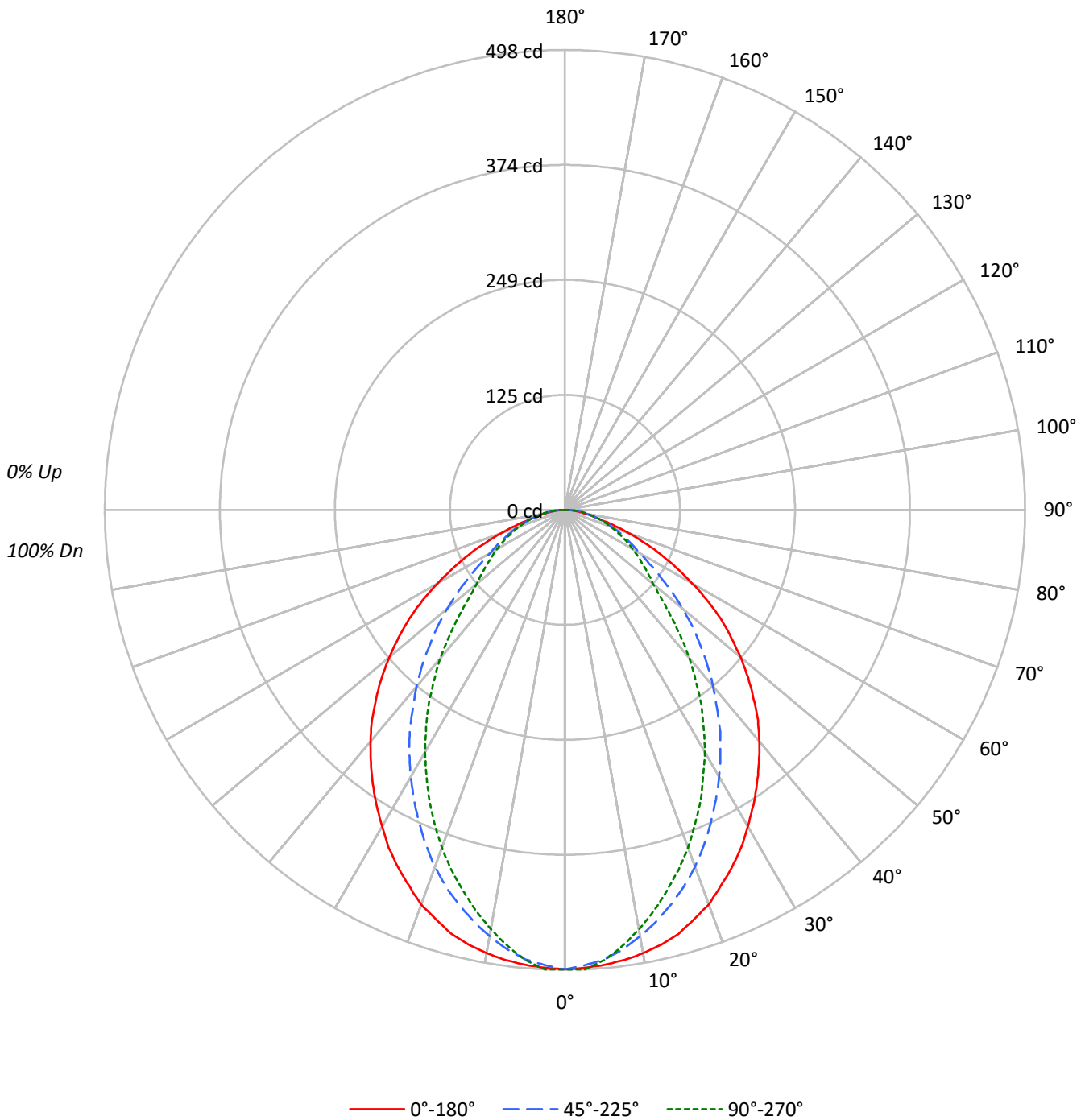
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 959.2 lumens  
Efficiency: N/A  
Efficacy: 48.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12  
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	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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88				86	
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76				74	
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66				64	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58				56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52				50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46				44	
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42				40	
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38				36	
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35				33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32				30	

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

	0°	45°	90°
0°	4284	4284	4284
5°	4274	4224	4230
10°	4263	4099	4033
15°	4236	3945	3804
20°	4168	3771	3567
25°	4060	3549	3299
30°	3935	3319	3011
35°	3810	3079	2704
40°	3680	2806	2359
45°	3517	2520	1972
50°	3321	2224	1668
55°	3090	1887	1545
60°	2738	1600	1460
65°	2335	1477	1381
70°	1825	1370	1309
75°	1244	1264	1264
80°	1071	1190	1220
85°	929	1156	1275

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3517 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.3	4.8
10°-20°	125.7	13.1
20°-30°	174.5	18.2
30°-40°	187.1	19.5
40°-50°	165.7	17.3
50°-60°	124.9	13.0
60°-70°	80.9	8.4
70°-80°	41.5	4.3
80°-90°	12.7	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°	346.5	36.1
0°-40°	533.5	55.6
0°-60°	824.1	85.9
0°-90°	959.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	959.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	494	495	489	489	489	47
15°	475	465	442	431	427	134
25°	427	404	374	354	347	197
35°	362	330	293	267	257	227
45°	289	251	207	175	162	223
55°	206	171	126	106	103	183
65°	115	92	72	68	68	114
75°	37	39	38	38	38	44
85°	9	10	12	13	13	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	497.5	497.5	497.5	497.5	497.5
2.5°	496.3	498.0	493.4	496.9	498.0
5°	494.5	495.1	488.7	489.3	489.3
7.5°	491.6	490.4	479.9	477.0	476.4
10°	487.5	484.0	468.8	463.0	461.2
12.5°	482.3	475.8	456.5	448.4	444.8
15°	475.2	464.7	442.5	431.4	426.7
17.5°	464.7	451.3	427.9	413.9	408.6
20°	454.8	436.7	411.5	394.0	389.3
22.5°	440.8	421.5	392.8	374.1	368.3
25°	427.3	404.5	373.5	353.7	347.2
27.5°	412.7	387.0	353.7	332.6	324.4
30°	395.7	368.3	333.8	311.6	302.8
32.5°	379.4	350.1	313.3	288.8	279.4
35°	362.4	329.7	292.9	266.6	257.2
37.5°	344.9	310.4	270.1	244.3	232.1
40°	327.4	291.1	249.6	220.4	209.9
42.5°	309.2	271.2	228.6	198.2	184.7
45°	288.8	251.4	206.9	174.8	161.9
47.5°	268.9	232.1	187.1	152.0	140.3
50°	247.9	211.6	166.0	132.1	124.5
52.5°	226.8	190.6	145.6	116.9	113.4
55°	205.8	171.3	125.7	105.8	102.9
57.5°	182.4	151.4	108.1	95.9	93.5
60°	159.0	129.8	92.9	86.5	84.8
62.5°	136.2	111.1	82.4	77.2	76.0
65°	114.6	92.4	72.5	68.4	67.8
67.5°	93.5	76.0	63.1	60.8	59.6
70°	72.5	60.8	54.4	53.2	52.0
72.5°	53.8	49.1	46.2	45.6	45.0
75°	37.4	39.2	38.0	38.0	38.0
77.5°	29.8	30.4	31.0	31.6	31.0
80°	21.6	23.4	24.0	25.1	24.6
82.5°	15.2	16.4	18.1	18.7	19.3
85°	9.4	9.9	11.7	12.9	12.9
87.5°	4.1	4.7	5.8	7.0	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)