

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: P1060312

Luminaire Tested: S124RDR-S1195D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060312  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1195D835-X4F0-XX-UDD-SVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

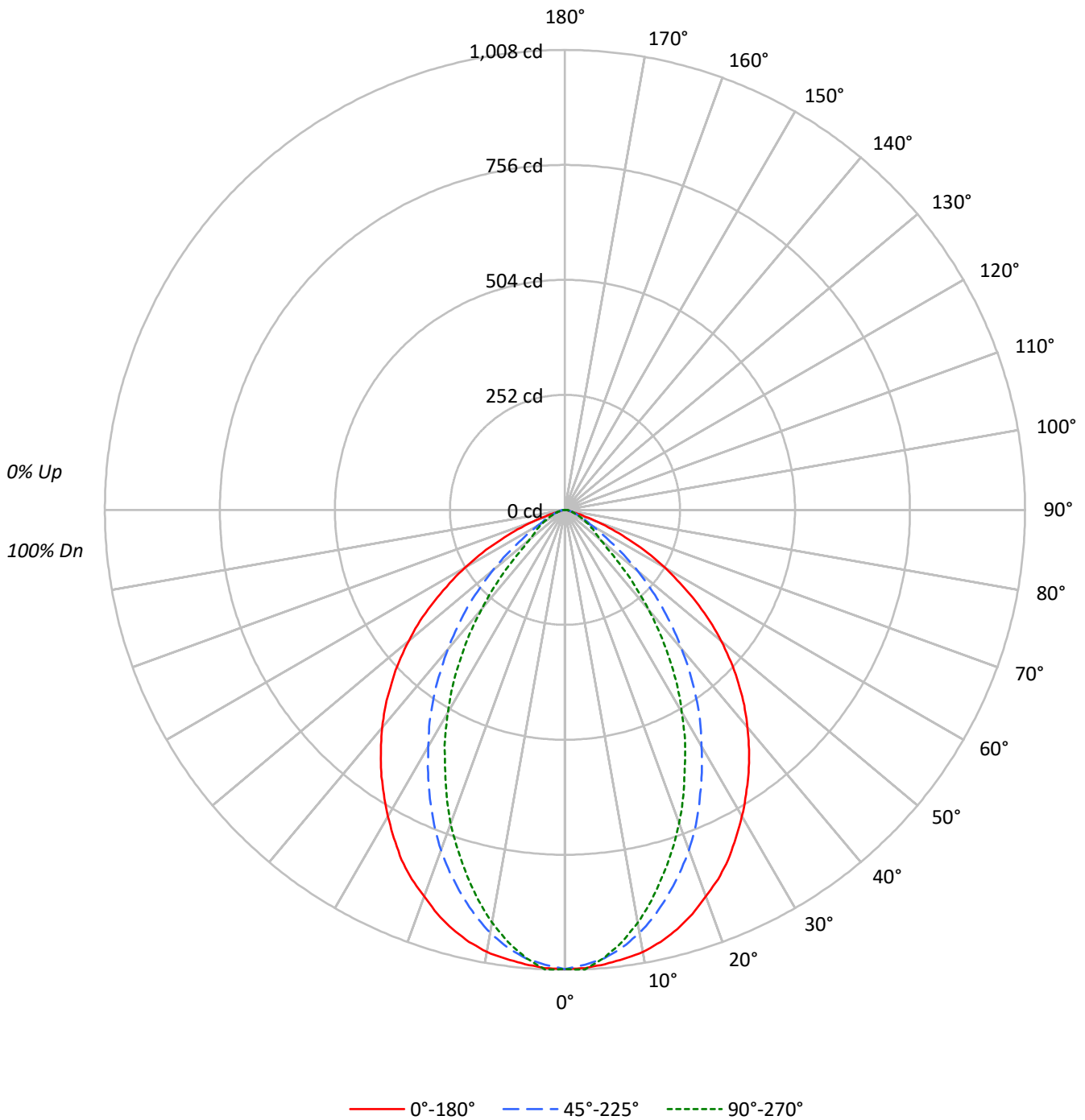
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1484.2 lumens  
Efficiency: N/A  
Efficacy: 35.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	94	95	93	92	90				90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43				43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

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

	0°	45°	90°
0°	8669	8669	8669
5°	8641	8530	8518
10°	8604	8232	8034
15°	8482	7786	7395
20°	8264	7276	6704
25°	8043	6641	5900
30°	7712	5949	5090
35°	7379	5261	4203
40°	6998	4478	3188
45°	6544	3661	2141
50°	5983	2773	1330
55°	5258	1830	1127
60°	4347	1123	928
65°	3148	866	752
70°	1715	642	572
75°	376	472	519
80°	283	352	422
85°	277	277	425

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6544 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.3	6.3
10°-20°	247.7	16.7
20°-30°	328.2	22.1
30°-40°	325.7	21.9
40°-50°	250.6	16.9
50°-60°	149.4	10.1
60°-70°	67.9	4.6
70°-80°	17.6	1.2
80°-90°	3.9	0.3
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°	669.1	45.1
0°-40°	994.9	67.0
0°-60°	1394.9	94.0
0°-90°	1484.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1484.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1007	1007	1007	1007	1007	
5°	1000	1001	987	987	985	95
15°	951	927	873	844	830	268
25°	846	786	699	641	621	389
35°	702	614	500	424	400	438
45°	537	432	301	210	176	414
55°	350	250	122	77	75	312
65°	154	92	42	37	37	155
75°	11	14	14	16	16	24
85°	3	3	3	4	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1006.7	1006.7	1006.7	1006.7	1006.7
2.5°	1005.3	1006.7	998.2	1005.3	1008.1
5°	999.6	1001.0	986.8	986.8	985.4
7.5°	992.5	989.7	967.0	958.5	955.7
10°	984.0	974.1	941.5	924.5	918.8
12.5°	969.8	954.2	910.3	886.2	876.3
15°	951.4	927.3	873.4	843.6	829.5
17.5°	928.7	898.9	835.1	796.9	781.3
20°	901.8	862.1	794.0	745.8	731.6
22.5°	876.3	826.6	748.6	693.3	677.7
25°	846.5	785.5	699.0	640.9	621.0
27.5°	811.0	745.8	649.4	589.8	570.0
30°	775.6	703.3	598.3	536.0	511.9
32.5°	738.7	659.3	551.6	480.7	458.0
35°	701.9	613.9	500.5	423.9	399.8
37.5°	662.2	568.6	449.5	370.1	343.1
40°	622.5	524.6	398.4	317.6	283.6
42.5°	581.3	479.2	348.8	263.7	229.7
45°	537.4	432.5	300.6	209.8	175.8
47.5°	493.4	388.5	252.4	157.4	126.2
50°	446.6	341.7	207.0	114.8	99.3
52.5°	399.8	296.3	161.6	89.3	85.1
55°	350.2	249.5	121.9	76.6	75.1
57.5°	299.2	207.0	87.9	66.6	63.8
60°	252.4	167.3	65.2	56.7	53.9
62.5°	204.2	126.2	53.9	46.8	44.0
65°	154.5	92.2	42.5	36.9	36.9
67.5°	112.0	62.4	34.0	29.8	28.4
70°	68.1	38.3	25.5	24.1	22.7
72.5°	34.0	22.7	19.9	18.4	18.4
75°	11.3	14.2	14.2	15.6	15.6
77.5°	8.5	9.9	9.9	11.3	11.3
80°	5.7	7.1	7.1	8.5	8.5
82.5°	4.3	4.3	5.7	5.7	7.1
85°	2.8	2.8	2.8	4.3	4.3
87.5°	1.4	1.4	1.4	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)