

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: P1060558

Luminaire Tested: S124RDR-S795D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060558  
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-S795D835-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, 80 CRI LEDS  
Ballast/Driver: -

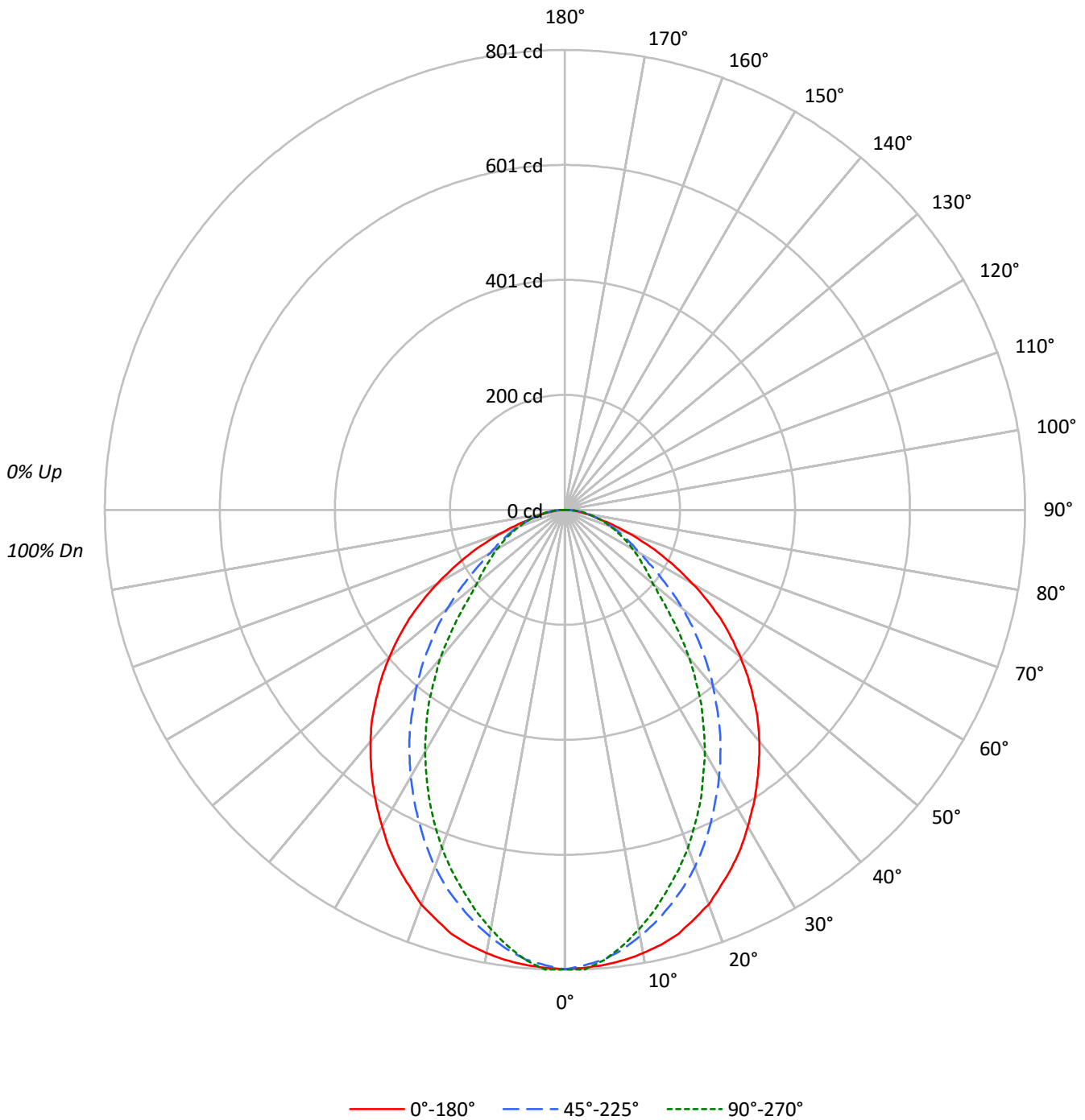
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1542.7 lumens  
Efficiency: N/A  
Efficacy: 59.8 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): 25.8  
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				30

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

	0°	45°	90°
0°	6890	6890	6890
5°	6875	6794	6802
10°	6856	6593	6486
15°	6814	6345	6118
20°	6702	6066	5737
25°	6530	5708	5306
30°	6329	5338	4842
35°	6128	4951	4349
40°	5918	4512	3794
45°	5655	4053	3171
50°	5340	3577	2683
55°	4968	3034	2485
60°	4404	2575	2347
65°	3755	2376	2223
70°	2936	2200	2107
75°	2003	2033	2033
80°	1726	1909	1959
85°	1482	1857	2045

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5655 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.4	4.8
10°-20°	202.2	13.1
20°-30°	280.7	18.2
30°-40°	300.8	19.5
40°-50°	266.5	17.3
50°-60°	200.8	13.0
60°-70°	130.1	8.4
70°-80°	66.7	4.3
80°-90°	20.5	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°	557.2	36.1
0°-40°	858.1	55.6
0°-60°	1325.4	85.9
0°-90°	1542.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1542.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	795	796	786	787	787	76
15°	764	747	712	694	686	215
25°	687	651	601	569	558	316
35°	583	530	471	429	414	364
45°	464	404	333	281	260	358
55°	331	276	202	170	166	294
65°	184	148	117	110	109	183
75°	60	63	61	61	61	71
85°	15	16	19	21	21	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	800.1	800.1	800.1	800.1	800.1
2.5°	798.2	801.0	793.5	799.1	801.0
5°	795.4	796.3	786.0	786.9	786.9
7.5°	790.7	788.8	771.9	767.2	766.2
10°	784.1	778.4	754.0	744.6	741.8
12.5°	775.6	765.3	734.3	721.1	715.5
15°	764.3	747.4	711.7	693.8	686.3
17.5°	747.4	725.8	688.2	665.6	657.2
20°	731.4	702.3	661.9	633.7	626.1
22.5°	708.9	677.9	631.8	601.7	592.3
25°	687.3	650.6	600.8	568.8	558.5
27.5°	663.7	622.4	568.8	534.9	521.8
30°	636.5	592.3	536.8	501.1	487.0
32.5°	610.2	563.2	503.9	464.4	449.4
35°	582.9	530.2	471.0	428.7	413.7
37.5°	554.7	499.2	434.4	393.0	373.2
40°	526.5	468.2	401.4	354.4	337.5
42.5°	497.3	436.2	367.6	318.7	297.1
45°	464.4	404.3	332.8	281.1	260.4
47.5°	432.5	373.2	300.8	244.4	225.6
50°	398.6	340.3	267.0	212.5	200.3
52.5°	364.8	306.5	234.1	188.0	182.4
55°	330.9	275.5	202.1	170.2	165.5
57.5°	293.3	243.5	173.9	154.2	150.4
60°	255.7	208.7	149.5	139.1	136.3
62.5°	219.1	178.6	132.6	124.1	122.2
65°	184.3	148.5	116.6	110.0	109.1
67.5°	150.4	122.2	101.5	97.8	95.9
70°	116.6	97.8	87.4	85.6	83.7
72.5°	86.5	79.0	74.3	73.3	72.4
75°	60.2	63.0	61.1	61.1	61.1
77.5°	47.9	48.9	49.8	50.8	49.8
80°	34.8	37.6	38.5	40.4	39.5
82.5°	24.4	26.3	29.1	30.1	31.0
85°	15.0	16.0	18.8	20.7	20.7
87.5°	6.6	7.5	9.4	11.3	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)