

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: P1060576

Luminaire Tested: S124RDR-S795D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060576  
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-S795D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

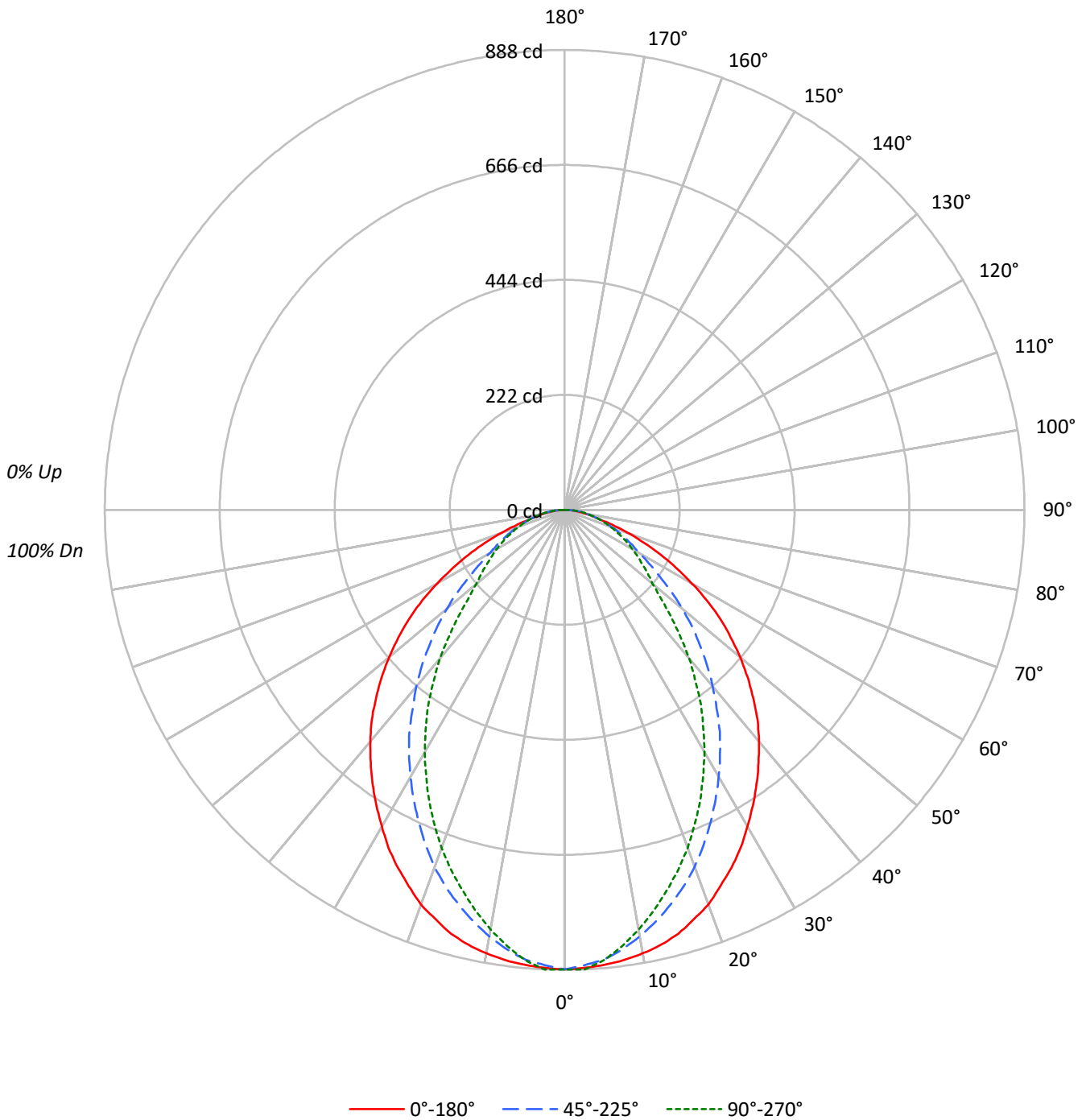
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1710.8 lumens  
Efficiency: N/A  
Efficacy: 66.3 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°	7641	7641	7641
5°	7625	7534	7544
10°	7604	7312	7193
15°	7557	7037	6785
20°	7434	6726	6363
25°	7242	6330	5884
30°	7019	5919	5370
35°	6795	5492	4823
40°	6564	5005	4208
45°	6273	4495	3517
50°	5923	3967	2975
55°	5510	3366	2755
60°	4884	2855	2604
65°	4165	2635	2463
70°	3255	2442	2336
75°	2219	2256	2256
80°	1914	2117	2172
85°	1650	2065	2263

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6273 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.5	4.8
10°-20°	224.2	13.1
20°-30°	311.2	18.2
30°-40°	333.6	19.5
40°-50°	295.6	17.3
50°-60°	222.7	13.0
60°-70°	144.2	8.4
70°-80°	74.0	4.3
80°-90°	22.7	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°	618.0	36.1
0°-40°	951.6	55.6
0°-60°	1469.9	85.9
0°-90°	1710.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1710.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	882	883	872	873	873	84
15°	848	829	789	770	761	238
25°	762	722	666	631	619	351
35°	646	588	522	475	459	404
45°	515	448	369	312	289	397
55°	367	306	224	189	184	326
65°	204	165	129	122	121	203
75°	67	70	68	68	68	79
85°	17	18	21	23	23	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	887.3	887.3	887.3	887.3	887.3
2.5°	885.2	888.3	880.0	886.2	888.3
5°	882.1	883.1	871.6	872.7	872.7
7.5°	876.9	874.8	856.0	850.8	849.7
10°	869.6	863.3	836.2	825.8	822.6
12.5°	860.2	848.7	814.3	799.7	793.4
15°	847.7	828.9	789.3	769.5	761.1
17.5°	828.9	804.9	763.2	738.2	728.8
20°	811.2	778.8	734.0	702.7	694.4
22.5°	786.1	751.7	700.6	667.3	656.9
25°	762.2	721.5	666.2	630.8	619.3
27.5°	736.1	690.2	630.8	593.3	578.7
30°	705.9	656.9	595.3	555.7	540.1
32.5°	676.7	624.5	558.9	515.1	498.4
35°	646.4	588.0	522.4	475.4	458.8
37.5°	615.2	553.6	481.7	435.8	413.9
40°	583.9	519.2	445.2	393.1	374.3
42.5°	551.6	483.8	407.7	353.5	329.5
45°	515.1	448.3	369.1	311.7	288.8
47.5°	479.6	413.9	333.6	271.1	250.2
50°	442.1	377.4	296.1	235.6	222.1
52.5°	404.5	339.9	259.6	208.5	202.3
55°	367.0	305.5	224.2	188.7	183.5
57.5°	325.3	270.0	192.9	171.0	166.8
60°	283.6	231.5	165.8	154.3	151.2
62.5°	242.9	198.1	147.0	137.6	135.5
65°	204.4	164.7	129.3	122.0	120.9
67.5°	166.8	135.5	112.6	108.4	106.3
70°	129.3	108.4	97.0	94.9	92.8
72.5°	95.9	87.6	82.4	81.3	80.3
75°	66.7	69.9	67.8	67.8	67.8
77.5°	53.2	54.2	55.3	56.3	55.3
80°	38.6	41.7	42.7	44.8	43.8
82.5°	27.1	29.2	32.3	33.4	34.4
85°	16.7	17.7	20.9	22.9	22.9
87.5°	7.3	8.3	10.4	12.5	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)