

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: P1060573

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060573  
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-S795D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

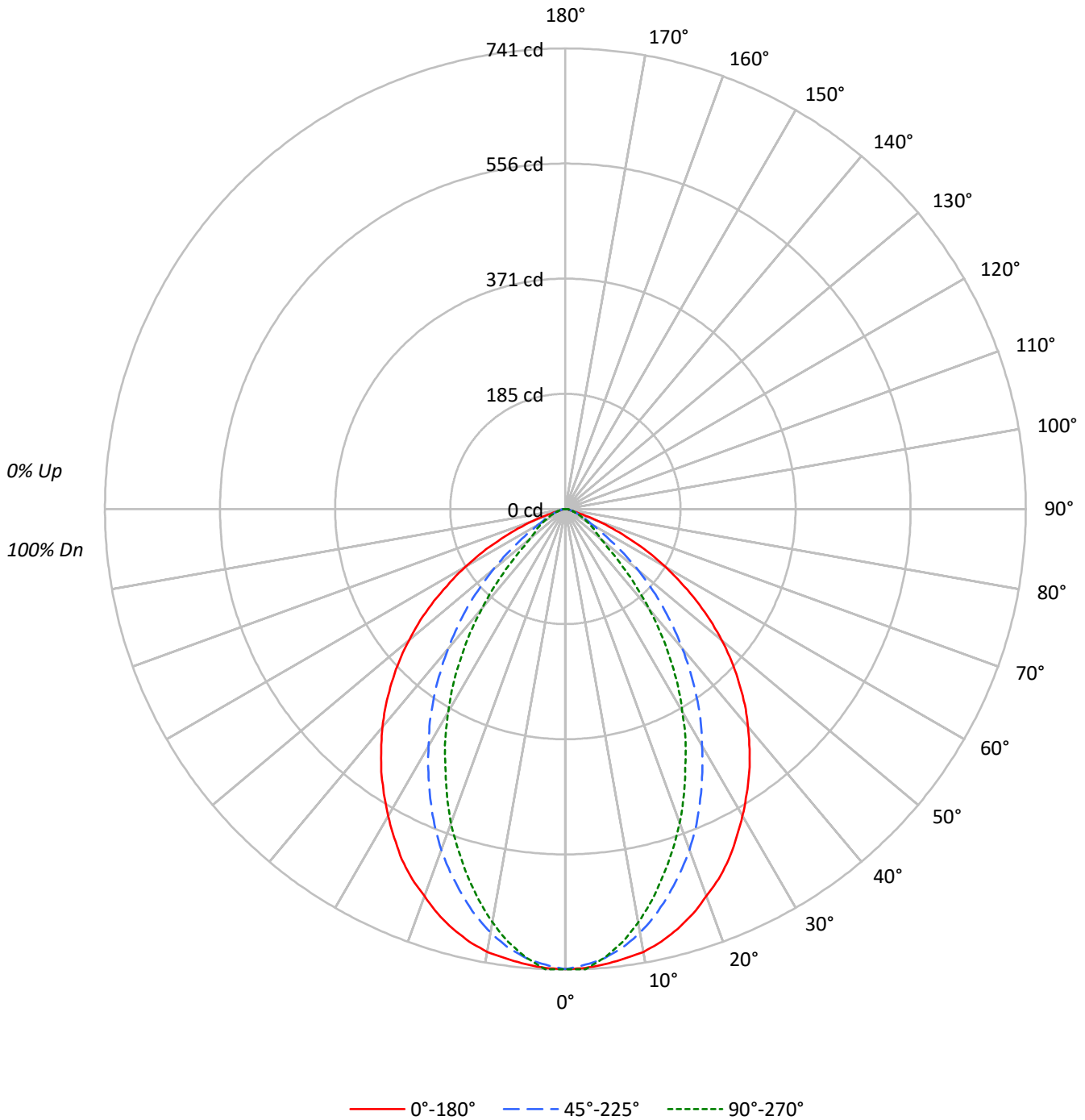
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1091.4 lumens  
Efficiency: N/A  
Efficacy: 42.3 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): 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	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°	6375	6375	6375
5°	6353	6273	6263
10°	6327	6053	5907
15°	6237	5726	5437
20°	6076	5351	4930
25°	5914	4884	4339
30°	5671	4375	3743
35°	5425	3869	3091
40°	5145	3294	2344
45°	4813	2691	1575
50°	4399	2039	978
55°	3866	1347	830
60°	3196	827	682
65°	2315	638	552
70°	1259	473	420
75°	276	346	383
80°	208	258	312
85°	207	207	306

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4813 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.6	6.3
10°-20°	182.2	16.7
20°-30°	241.3	22.1
30°-40°	239.5	21.9
40°-50°	184.3	16.9
50°-60°	109.8	10.1
60°-70°	49.9	4.6
70°-80°	12.9	1.2
80°-90°	2.9	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°	492.0	45.1
0°-40°	731.5	67.0
0°-60°	1025.7	94.0
0°-90°	1091.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1091.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	735	736	726	726	725	70
15°	700	682	642	620	610	197
25°	622	578	514	471	457	286
35°	516	452	368	312	294	322
45°	395	318	221	154	129	304
55°	258	184	90	56	55	229
65°	114	68	31	27	27	114
75°	8	10	10	12	12	17
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	740.3	740.3	740.3	740.3	740.3
2.5°	739.2	740.3	734.0	739.2	741.3
5°	735.0	736.1	725.7	725.7	724.6
7.5°	729.8	727.8	711.1	704.8	702.7
10°	723.6	716.3	692.3	679.8	675.6
12.5°	713.2	701.7	669.4	651.6	644.3
15°	699.6	681.9	642.3	620.4	609.9
17.5°	682.9	661.0	614.1	586.0	574.5
20°	663.1	633.9	583.9	548.4	538.0
22.5°	644.3	607.8	550.5	509.8	498.4
25°	622.4	577.6	514.0	471.3	456.7
27.5°	596.4	548.4	477.5	433.7	419.1
30°	570.3	517.1	440.0	394.1	376.4
32.5°	543.2	484.8	405.6	353.4	336.8
35°	516.1	451.5	368.0	311.7	294.0
37.5°	486.9	418.1	330.5	272.1	252.3
40°	457.7	385.8	293.0	233.5	208.5
42.5°	427.5	352.4	256.5	193.9	168.9
45°	395.2	318.0	221.0	154.3	129.3
47.5°	362.8	285.7	185.6	115.7	92.8
50°	328.4	251.3	152.2	84.5	73.0
52.5°	294.0	217.9	118.9	65.7	62.6
55°	257.5	183.5	89.7	56.3	55.3
57.5°	220.0	152.2	64.6	49.0	46.9
60°	185.6	123.0	48.0	41.7	39.6
62.5°	150.1	92.8	39.6	34.4	32.3
65°	113.6	67.8	31.3	27.1	27.1
67.5°	82.4	45.9	25.0	21.9	20.9
70°	50.0	28.2	18.8	17.7	16.7
72.5°	25.0	16.7	14.6	13.6	13.6
75°	8.3	10.4	10.4	11.5	11.5
77.5°	6.3	7.3	7.3	8.3	8.3
80°	4.2	5.2	5.2	6.3	6.3
82.5°	3.1	3.1	4.2	4.2	5.2
85°	2.1	2.1	2.1	3.1	3.1
87.5°	1.0	1.0	1.0	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)