

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: P1060606

Luminaire Tested: S124RDR-S795D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060606  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D940-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

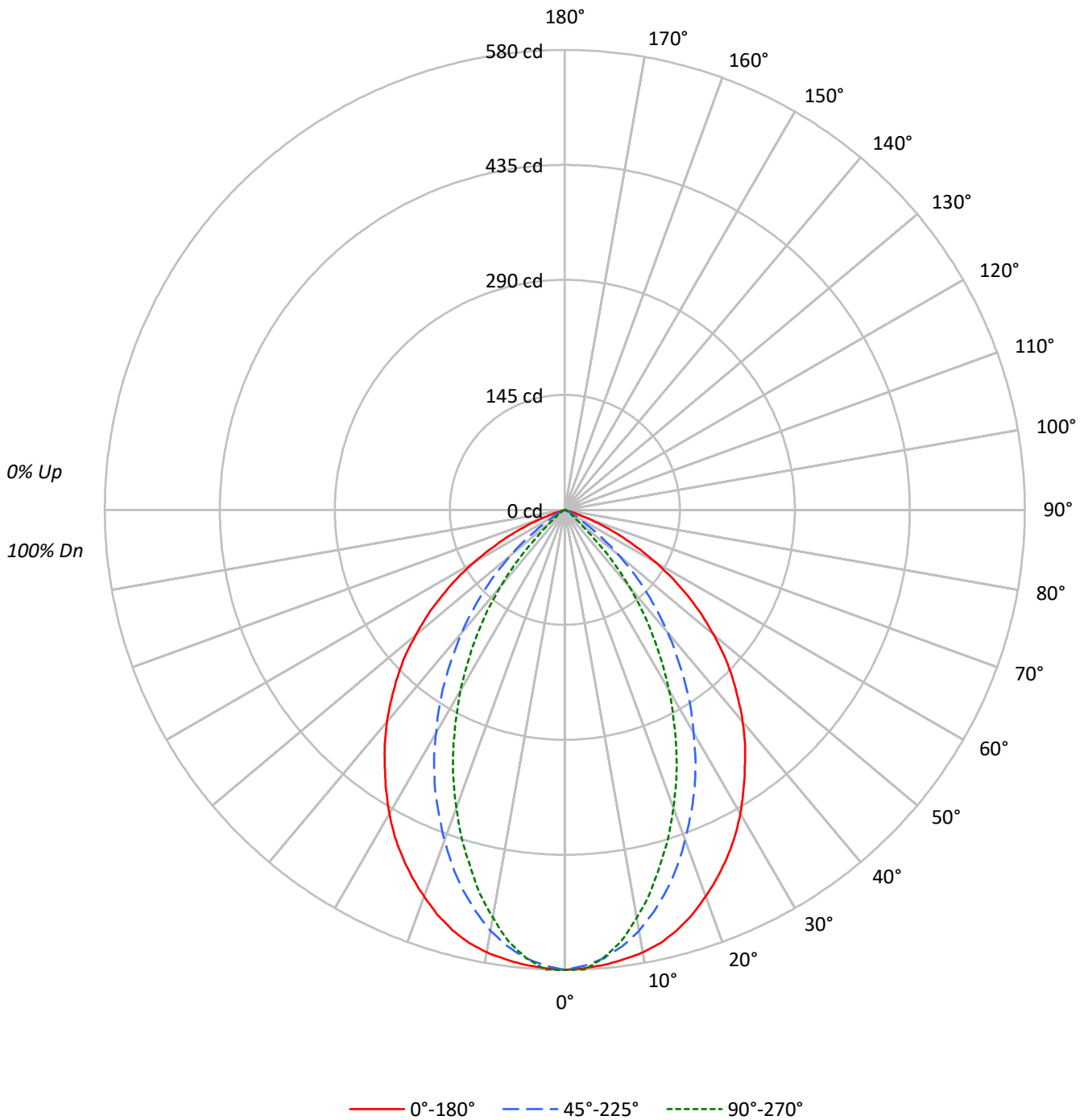
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 757.5 lumens  
Efficiency: N/A  
Efficacy: 29.4 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	4995	4995	4995
5°	4978	4906	4899
10°	4955	4714	4567
15°	4888	4424	4133
20°	4755	4064	3665
25°	4596	3680	3162
30°	4401	3226	2617
35°	4160	2767	2036
40°	3921	2271	1423
45°	3635	1746	704
50°	3279	1179	236
55°	2831	604	164
60°	2266	217	115
65°	1555	120	51
70°	697	63	43
75°	0	27	27
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3635 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.6	7.1
10°-20°	140.4	18.5
20°-30°	181.8	24.0
30°-40°	172.7	22.8
40°-50°	122.3	16.1
50°-60°	62.8	8.3
60°-70°	22.0	2.9
70°-80°	1.9	0.3
80°-90°	0.0	0.0
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°	375.8	49.6
0°-40°	548.5	72.4
0°-60°	733.7	96.8
0°-90°	757.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	580	580	580	580	580	
5°	576	577	568	568	567	55
15°	548	532	496	473	464	154
25°	484	446	387	346	333	222
35°	396	338	263	212	194	248
45°	298	230	143	82	58	230
55°	189	124	40	12	11	169
65°	76	37	6	3	2	76
75°	0	1	1	1	1	6
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	580.1	580.1	580.1	580.1	580.1
2.5°	578.5	580.1	575.1	579.3	580.1
5°	575.9	576.8	567.6	567.6	566.7
7.5°	571.8	570.1	555.0	549.1	548.3
10°	566.7	560.9	539.1	526.5	522.3
12.5°	559.2	548.3	518.9	500.5	495.5
15°	548.3	531.5	496.3	472.8	463.6
17.5°	534.9	513.1	471.2	442.6	433.4
20°	518.9	491.3	443.5	411.6	399.9
22.5°	502.2	470.3	415.0	378.9	367.2
25°	483.7	446.0	387.3	346.2	332.8
27.5°	464.4	420.0	357.1	314.4	296.8
30°	442.6	394.0	324.4	280.0	263.2
32.5°	419.2	365.5	295.1	247.3	227.2
35°	395.7	337.9	263.2	212.1	193.7
37.5°	373.1	311.9	231.4	177.7	160.1
40°	348.8	283.4	202.0	146.7	126.6
42.5°	323.6	255.7	171.9	114.9	93.1
45°	298.5	229.7	143.4	82.2	57.8
47.5°	273.3	202.0	115.7	52.0	31.0
50°	244.8	175.2	88.0	27.7	17.6
52.5°	218.0	150.1	62.9	15.9	13.4
55°	188.6	124.1	40.2	11.7	10.9
57.5°	161.0	98.9	22.6	9.2	8.4
60°	131.6	76.3	12.6	7.5	6.7
62.5°	102.3	55.3	8.4	5.0	4.2
65°	76.3	36.9	5.9	3.4	2.5
67.5°	50.3	21.0	4.2	1.7	1.7
70°	27.7	10.1	2.5	1.7	1.7
72.5°	10.1	3.4	1.7	0.8	0.8
75°	0.0	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)