

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: P1060554

Luminaire Tested: S124RDR-S795D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060554  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D835-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

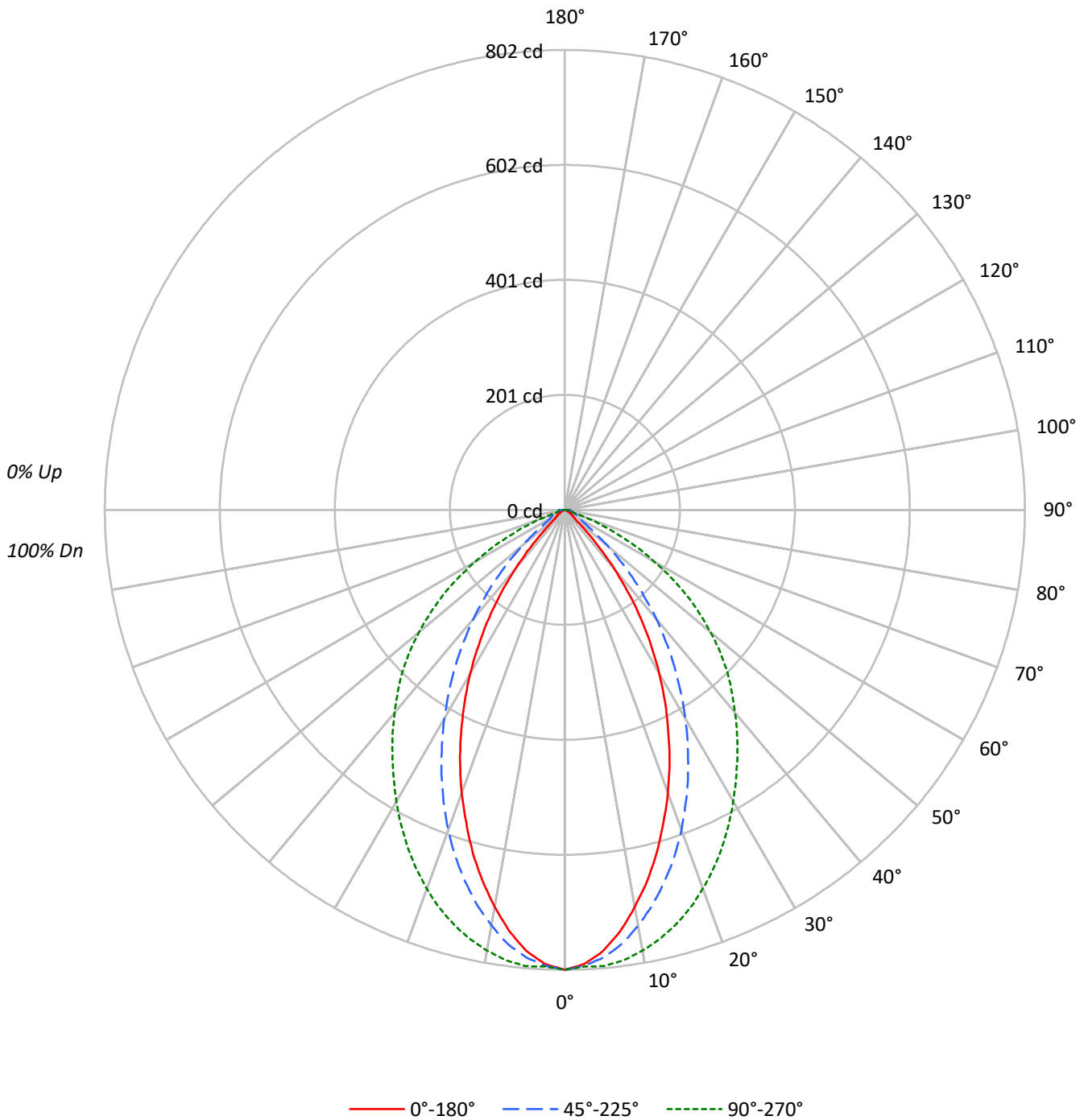
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1010.9 lumens  
Efficiency: N/A  
Efficacy: 39.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				

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

	0°	45°	90°
0°	6907	6907	6907
5°	6672	6770	6901
10°	6149	6437	6824
15°	5522	5984	6672
20°	4814	5443	6444
25°	4061	4830	6163
30°	3276	4175	5841
35°	2424	3493	5512
40°	1503	2783	5185
45°	597	2029	4883
50°	265	1274	4440
55°	212	664	3887
60°	146	503	3097
65°	96	499	2129
70°	96	451	995
75°	126	439	439
80°	188	516	516
85°	375	1028	741

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4883 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	7.3
10°-20°	189.9	18.8
20°-30°	239.7	23.7
30°-40°	219.9	21.8
40°-50°	149.8	14.8
50°-60°	81.6	8.1
60°-70°	35.3	3.5
70°-80°	12.9	1.3
80°-90°	8.3	0.8
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°	503.1	49.8
0°-40°	723.0	71.5
0°-60°	954.4	94.4
0°-90°	1010.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	772	782	783	792	798	71
15°	619	641	671	719	748	172
25°	427	458	508	589	649	195
35°	231	264	332	438	524	142
45°	49	82	167	296	401	46
55°	14	15	44	163	259	13
65°	5	7	24	51	104	5
75°	4	12	13	13	13	4
85°	4	8	10	10	8	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	802.1	802.1	802.1	802.1	802.1
2.5°	792.6	802.1	795.5	797.3	797.3
5°	771.9	782.3	783.2	791.7	798.3
7.5°	740.9	755.9	763.5	780.4	791.7
10°	703.2	721.1	736.2	765.3	780.4
12.5°	662.7	683.4	706.0	744.6	766.3
15°	619.4	641.1	671.2	719.2	748.4
17.5°	571.4	597.8	634.5	691.9	727.7
20°	525.3	551.6	594.0	659.0	703.2
22.5°	477.3	504.6	551.6	624.1	676.9
25°	427.4	457.5	508.3	589.3	648.6
27.5°	378.4	410.4	464.1	552.6	618.5
30°	329.5	361.5	419.9	514.9	587.4
32.5°	279.6	312.5	375.6	475.4	555.4
35°	230.6	264.5	332.3	437.7	524.3
37.5°	180.7	216.5	289.0	401.0	493.3
40°	133.7	169.4	247.6	364.3	461.3
42.5°	89.4	125.2	205.2	328.5	431.2
45°	49.0	81.9	166.6	295.6	401.0
47.5°	26.4	45.2	129.0	263.6	367.1
50°	19.8	24.5	95.1	229.7	331.4
52.5°	16.9	18.8	65.9	193.9	295.6
55°	14.1	15.1	44.2	162.9	258.9
57.5°	11.3	12.2	32.9	131.8	219.3
60°	8.5	10.4	29.2	101.7	179.8
62.5°	6.6	8.5	27.3	74.4	142.1
65°	4.7	6.6	24.5	50.8	104.5
67.5°	4.7	7.5	20.7	32.9	70.6
70°	3.8	10.4	17.9	21.7	39.5
72.5°	3.8	11.3	15.1	15.1	15.1
75°	3.8	12.2	13.2	13.2	13.2
77.5°	3.8	11.3	12.2	11.3	11.3
80°	3.8	10.4	10.4	10.4	10.4
82.5°	3.8	9.4	10.4	10.4	8.5
85°	3.8	8.5	10.4	10.4	7.5
87.5°	2.8	8.5	9.4	9.4	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)