

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: P1060560

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060560  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
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-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

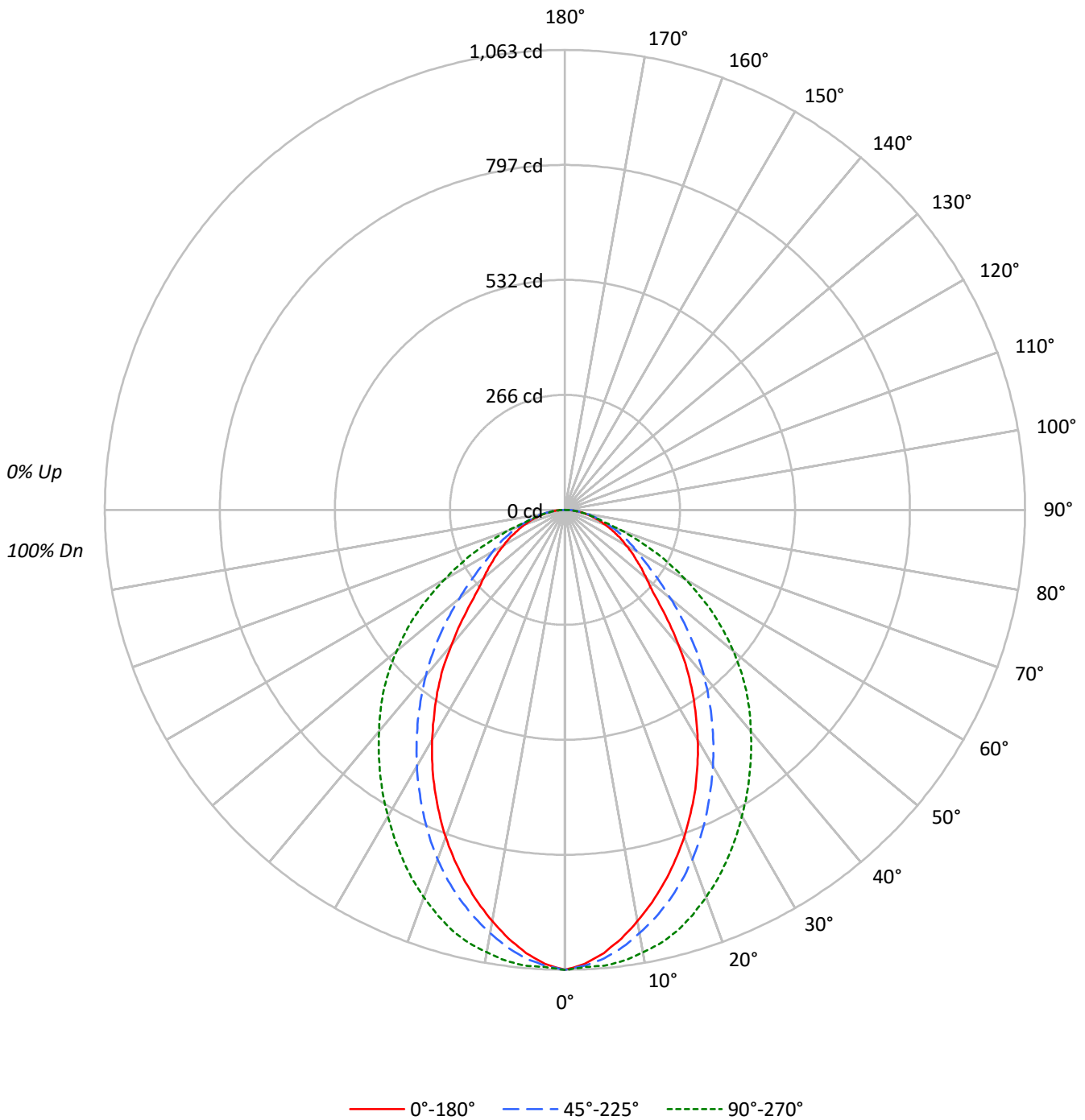
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1950.7 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
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	100	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65	65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57	57	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50	50	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40	40	40	40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37	37	37	37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33	33	33	33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31	31	31	31	

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

	0°	45°	90°
0°	9154	9154	9154
5°	8889	8994	9141
10°	8441	8687	9081
15°	7934	8320	8975
20°	7380	7880	8733
25°	6767	7357	8448
30°	6099	6801	8130
35°	5400	6221	7823
40°	4590	5616	7509
45°	3758	4961	7218
50°	3289	4260	6793
55°	3022	3672	6286
60°	2804	3305	5542
65°	2626	3105	4640
70°	2462	2843	3482
75°	2316	2598	2535
80°	2147	2380	2147
85°	1956	2322	1857

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7218 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.2	5.0
10°-20°	264.4	13.6
20°-30°	361.3	18.5
30°-40°	379.8	19.5
40°-50°	329.5	16.9
50°-60°	248.6	12.7
60°-70°	161.1	8.3
70°-80°	82.7	4.2
80°-90°	25.1	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°	723.9	37.1
0°-40°	1103.7	56.6
0°-60°	1681.8	86.2
0°-90°	1950.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1950.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1063	1063	1063	1063	1063	
5°	1028	1042	1040	1049	1058	96
15°	890	912	933	976	1007	249
25°	712	738	774	834	889	327
35°	514	542	592	671	744	319
45°	309	338	407	509	593	243
55°	201	207	245	347	419	181
65°	129	132	152	184	228	128
75°	70	78	78	79	76	74
85°	20	24	24	23	19	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1063.1	1063.1	1063.1	1063.1	1063.1
2.5°	1050.9	1064.0	1054.6	1056.5	1057.5
5°	1028.3	1042.4	1040.5	1049.0	1057.5
7.5°	999.1	1016.1	1019.8	1036.8	1050.9
10°	965.3	984.1	993.5	1020.8	1038.6
12.5°	929.5	948.3	965.3	1000.1	1025.5
15°	890.0	911.6	933.3	975.6	1006.7
17.5°	848.6	871.2	898.5	944.6	981.3
20°	805.3	827.9	859.9	909.8	953.0
22.5°	759.2	784.6	818.5	872.1	922.9
25°	712.2	737.6	774.3	833.5	889.1
27.5°	663.3	689.6	729.1	795.0	854.2
30°	613.4	641.6	684.0	753.6	817.6
32.5°	562.6	592.7	637.9	712.2	781.8
35°	513.7	541.9	591.8	670.8	744.2
37.5°	462.9	491.1	544.7	630.3	706.5
40°	408.3	439.4	499.6	588.0	668.0
42.5°	357.5	388.5	453.5	547.5	631.3
45°	308.6	337.7	407.4	509.0	592.7
47.5°	270.9	291.6	361.3	471.3	551.3
50°	245.5	255.0	318.0	429.9	507.1
52.5°	223.0	230.5	278.5	388.5	463.8
55°	201.3	207.0	244.6	347.2	418.7
57.5°	182.5	185.3	214.5	305.8	369.7
60°	162.8	166.5	191.9	263.4	321.8
62.5°	146.8	148.6	172.2	223.0	273.8
65°	128.9	131.7	152.4	184.4	227.7
67.5°	112.9	117.6	131.7	150.5	179.7
70°	97.8	104.4	112.9	122.3	138.3
72.5°	83.7	91.3	96.0	99.7	96.9
75°	69.6	78.1	78.1	79.0	76.2
77.5°	56.4	64.0	63.0	62.1	58.3
80°	43.3	49.9	48.0	47.0	43.3
82.5°	32.0	36.7	34.8	33.9	29.2
85°	19.8	24.5	23.5	22.6	18.8
87.5°	9.4	14.1	13.2	12.2	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)