

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: P1060569

Luminaire Tested: S124RDR-S795D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060569  
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-S795D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

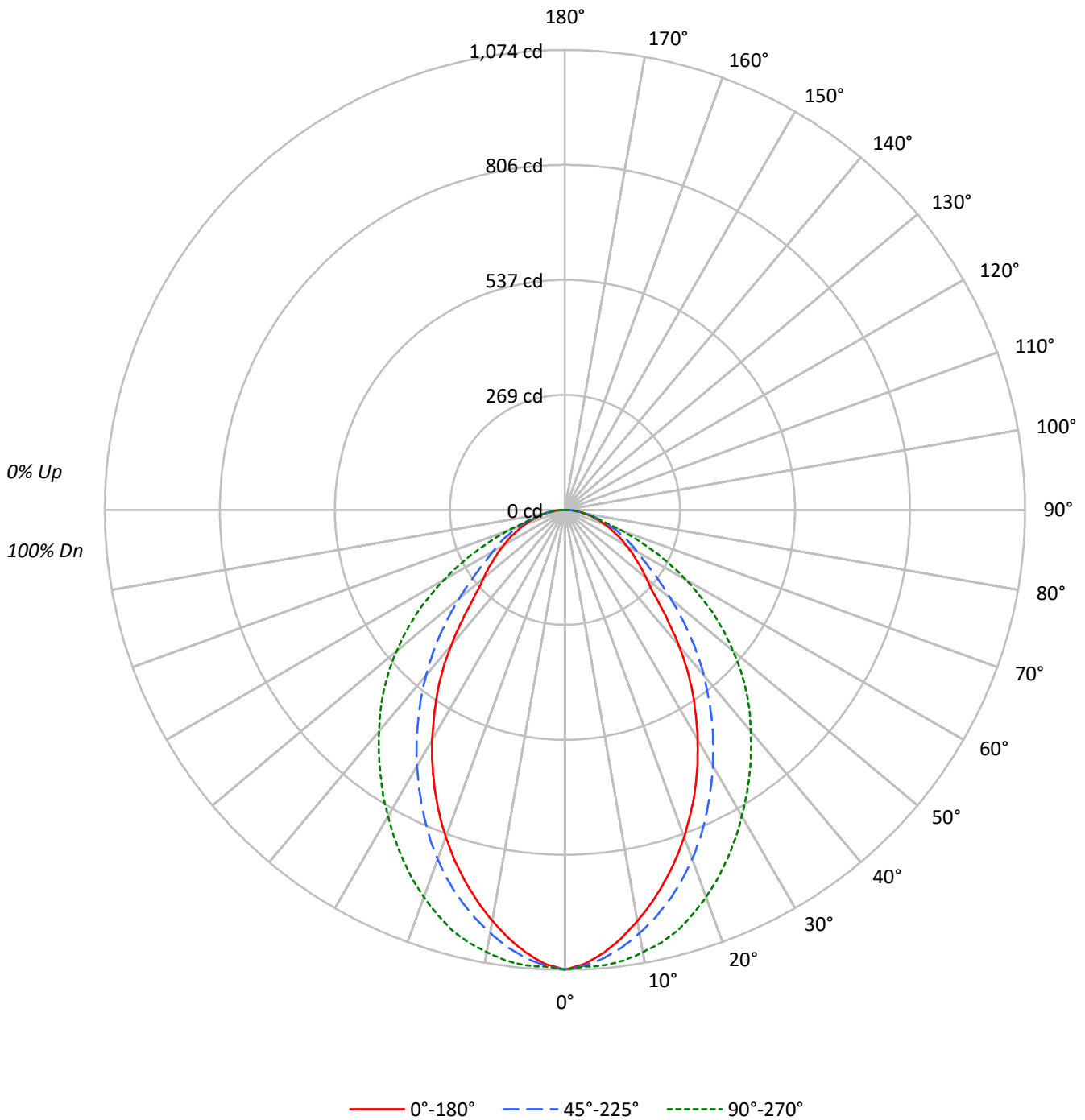
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1970.0 lumens  
Efficiency: N/A  
Efficacy: 76.4 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									
RC	80									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	108	104	100	97	100	97	94	96	93	91	92	90	89	87			87																
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75																
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65			65																
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57			57																
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50			50																
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45			45																
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40			40																
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37			37																
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33			33																
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31			31																

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

	0°	45°	90°
0°	9245	9245	9245
5°	8976	9083	9231
10°	8524	8773	9172
15°	8013	8402	9063
20°	7453	7958	8819
25°	6833	7429	8530
30°	6160	6868	8209
35°	5453	6282	7900
40°	4635	5671	7583
45°	3795	5010	7289
50°	3322	4302	6860
55°	3052	3708	6348
60°	2831	3338	5596
65°	2653	3136	4684
70°	2488	2870	3517
75°	2339	2625	2562
80°	2167	2405	2167
85°	1976	2351	1877

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7289 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	5.0
10°-20°	267.0	13.6
20°-30°	364.9	18.5
30°-40°	383.5	19.5
40°-50°	332.8	16.9
50°-60°	251.0	12.7
60°-70°	162.7	8.3
70°-80°	83.5	4.2
80°-90°	25.3	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°	731.1	37.1
0°-40°	1114.6	56.6
0°-60°	1698.4	86.2
0°-90°	1970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1970.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1038	1053	1051	1059	1068	97
15°	899	921	942	985	1017	252
25°	719	745	782	842	898	330
35°	519	547	598	677	752	323
45°	312	341	411	514	598	245
55°	203	209	247	351	423	183
65°	130	133	154	186	230	130
75°	70	79	79	80	77	75
85°	20	25	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°	1073.6	1073.6	1073.6	1073.6	1073.6
2.5°	1061.2	1074.5	1065.0	1066.9	1067.9
5°	1038.4	1052.7	1050.8	1059.3	1067.9
7.5°	1009.0	1026.1	1029.9	1047.0	1061.2
10°	974.8	993.8	1003.3	1030.8	1048.9
12.5°	938.7	957.7	974.8	1009.9	1035.6
15°	898.8	920.6	942.5	985.2	1016.6
17.5°	857.0	879.8	907.3	953.9	990.9
20°	813.3	836.1	868.4	918.7	962.4
22.5°	766.7	792.4	826.6	880.7	932.0
25°	719.2	744.9	781.9	841.8	897.8
27.5°	669.8	696.4	736.3	802.8	862.7
30°	619.5	648.0	690.7	761.0	825.6
32.5°	568.1	598.5	644.2	719.2	789.5
35°	518.7	547.2	597.6	677.4	751.5
37.5°	467.4	495.9	550.1	636.6	713.5
40°	412.3	443.7	504.5	593.8	674.6
42.5°	361.0	392.4	457.9	552.9	637.5
45°	311.6	341.1	411.4	514.0	598.5
47.5°	273.6	294.5	364.8	476.0	556.7
50°	248.0	257.5	321.1	434.2	512.1
52.5°	225.2	232.8	281.2	392.4	468.4
55°	203.3	209.0	247.0	350.6	422.8
57.5°	184.3	187.2	216.6	308.8	373.4
60°	164.4	168.2	193.8	266.0	324.9
62.5°	148.2	150.1	173.9	225.2	276.5
65°	130.2	133.0	153.9	186.2	229.9
67.5°	114.0	118.8	133.0	152.0	181.5
70°	98.8	105.5	114.0	123.5	139.7
72.5°	84.6	92.2	96.9	100.7	97.9
75°	70.3	78.9	78.9	79.8	77.0
77.5°	57.0	64.6	63.7	62.7	58.9
80°	43.7	50.4	48.5	47.5	43.7
82.5°	32.3	37.1	35.2	34.2	29.5
85°	20.0	24.7	23.8	22.8	19.0
87.5°	9.5	14.3	13.3	12.4	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)