

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: P1059390

Luminaire Tested: S123RDR-S775D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D935-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

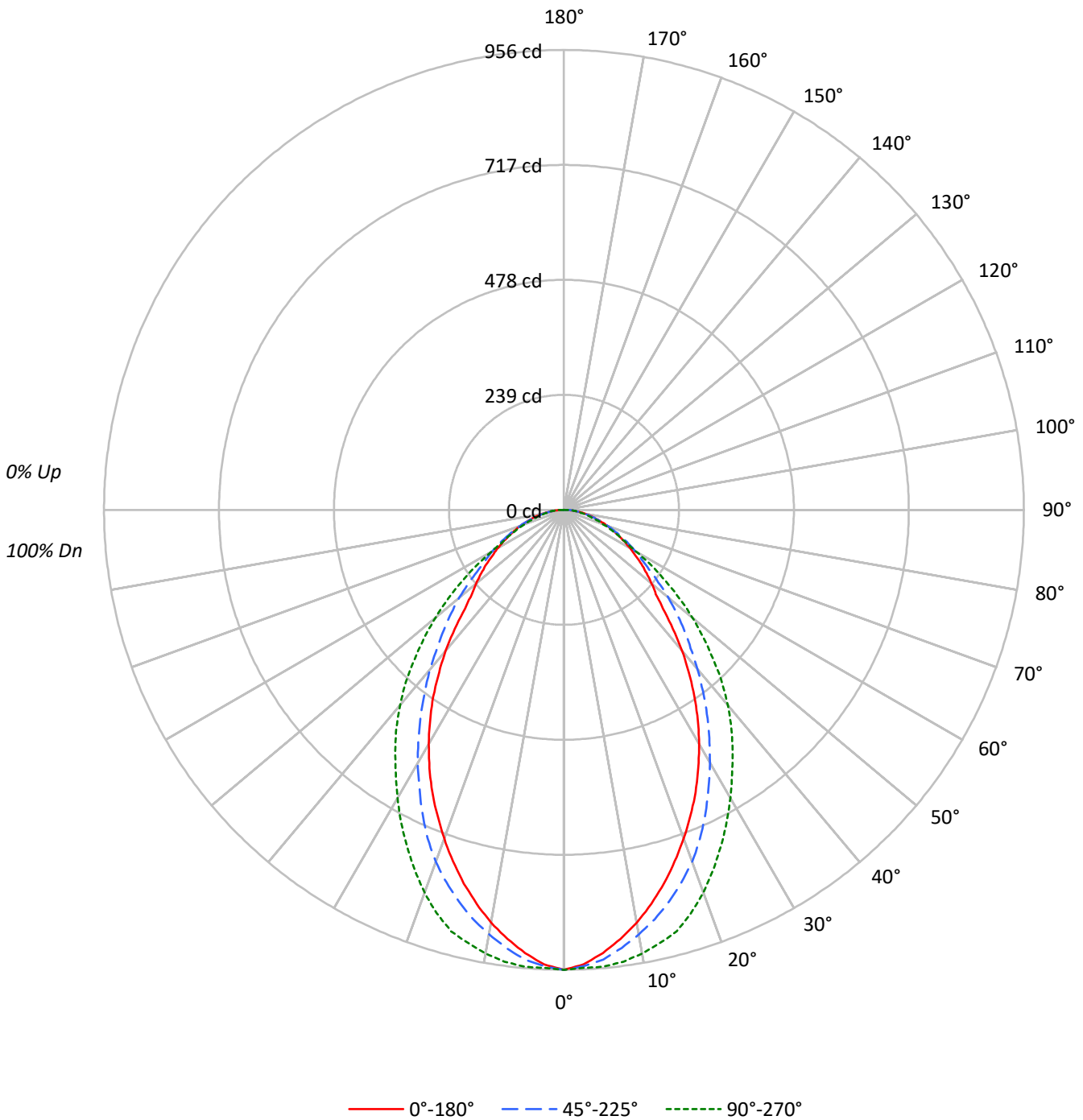
Lumens per Lamp: N/A
Luminaire Lumens: 1680.2 lumens
Efficiency: N/A
Efficacy: 65.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11228	11228	11228
5°	10902	11058	11232
10°	10390	10685	11165
15°	9773	10253	11024
20°	9090	9727	10580
25°	8391	9019	10000
30°	7620	8234	9383
35°	6782	7431	8764
40°	5852	6622	8123
45°	4837	5862	7284
50°	4344	5172	6359
55°	4027	4414	5274
60°	3711	4021	4039
65°	3454	3634	3384
70°	3248	3306	2966
75°	3062	2949	2613
80°	2894	2671	2448
85°	2775	2991	2775

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7284 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	5.3
10°-20°	238.6	14.2
20°-30°	322.8	19.2
30°-40°	331.7	19.7
40°-50°	278.6	16.6
50°-60°	199.7	11.9
60°-70°	127.1	7.6
70°-80°	69.9	4.2
80°-90°	23.3	1.4
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°	649.9	38.7
0°-40°	981.6	58.4
0°-60°	1459.9	86.9
0°-90°	1680.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	925	941	938	945	953	87
15°	804	826	843	880	907	225
25°	648	672	696	734	772	297
35°	473	499	518	564	611	294
45°	291	317	353	404	439	230
55°	197	201	216	244	258	176
65°	124	132	131	123	122	124
75°	68	74	65	60	58	72
85°	21	21	22	23	21	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	956.2	956.2	956.2	956.2	956.2
2.5°	945.5	958.6	949.6	950.4	952.9
5°	924.9	941.4	938.1	944.7	952.9
7.5°	899.4	917.5	918.3	934.0	947.1
10°	871.4	890.3	896.1	920.0	936.4
12.5°	838.5	859.1	871.4	901.0	922.4
15°	803.9	826.2	843.4	879.6	906.8
17.5°	766.1	790.0	812.2	850.8	878.8
20°	727.4	752.9	778.4	814.6	846.7
22.5°	687.1	713.4	739.8	775.1	810.5
25°	647.6	672.3	696.1	734.0	771.8
27.5°	604.8	630.3	650.9	692.9	732.4
30°	562.0	587.5	607.3	650.9	692.0
32.5°	517.6	543.9	562.0	607.3	650.1
35°	473.1	498.7	518.4	564.5	611.4
37.5°	426.2	454.2	474.0	525.8	571.9
40°	381.8	408.1	432.0	486.3	529.9
42.5°	335.7	362.9	390.0	446.0	486.3
45°	291.3	316.8	353.0	404.0	438.6
47.5°	259.2	275.7	317.6	360.4	393.3
50°	237.8	244.4	283.1	320.9	348.1
52.5°	216.4	221.4	247.7	282.2	302.8
55°	196.7	200.8	215.6	244.4	257.6
57.5°	175.3	179.4	191.7	208.2	215.6
60°	158.0	161.3	171.2	173.6	172.0
62.5°	140.7	145.6	150.6	144.8	142.4
65°	124.3	131.7	130.8	123.4	121.8
67.5°	109.4	116.8	112.7	105.3	102.9
70°	94.6	102.0	96.3	88.9	86.4
72.5°	80.6	88.9	79.8	73.2	71.6
75°	67.5	74.1	65.0	60.1	57.6
77.5°	55.1	60.1	51.8	47.7	46.1
80°	42.8	46.1	39.5	37.0	36.2
82.5°	31.3	32.9	28.8	30.4	29.6
85°	20.6	21.4	22.2	23.0	20.6
87.5°	9.9	14.0	14.0	13.2	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)