

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: P1060425

Luminaire Tested: S124RDR-S350D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060425
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-S350D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

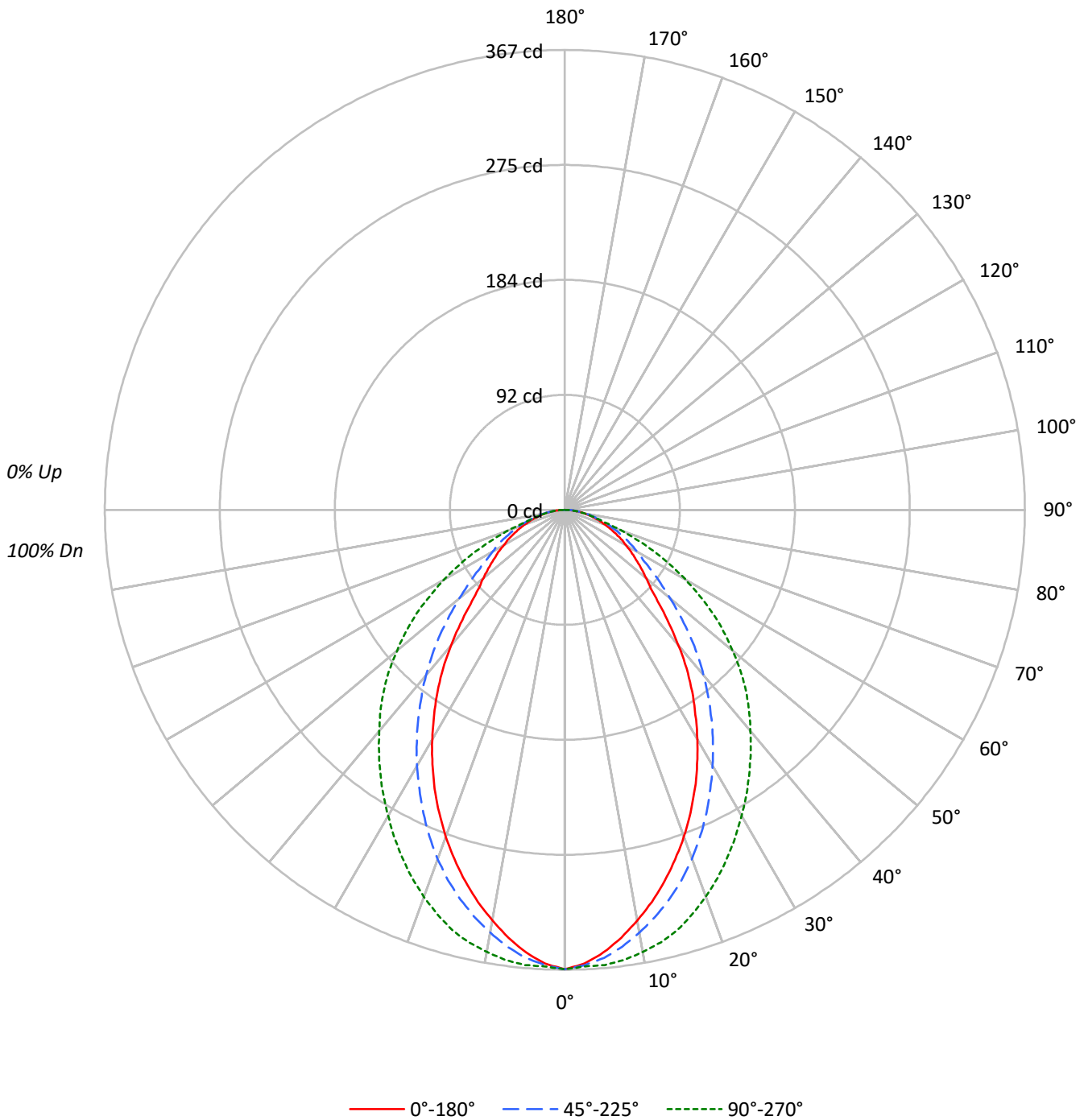
Lumens per Lamp: N/A
Luminaire Lumens: 672.6 lumens
Efficiency: N/A
Efficacy: 53.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	100	97	100	97	94	96	93	91	92	90	89	87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65				
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57				
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37				
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3157	3157	3157
5°	3065	3101	3152
10°	2910	2996	3131
15°	2736	2869	3094
20°	2545	2717	3011
25°	2334	2537	2912
30°	2103	2345	2803
35°	1862	2144	2697
40°	1583	1937	2589
45°	1296	1711	2489
50°	1135	1468	2342
55°	1042	1266	2168
60°	966	1140	1910
65°	905	1072	1599
70°	848	979	1201
75°	799	895	875
80°	739	818	739
85°	672	800	642

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2489 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	5.0
10°-20°	91.1	13.6
20°-30°	124.6	18.5
30°-40°	130.9	19.5
40°-50°	113.6	16.9
50°-60°	85.7	12.7
60°-70°	55.6	8.3
70°-80°	28.5	4.2
80°-90°	8.6	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°	249.6	37.1
0°-40°	380.5	56.6
0°-60°	579.9	86.2
0°-90°	672.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	672.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	355	359	359	362	365	33
15°	307	314	322	336	347	86
25°	246	254	267	287	306	113
35°	177	187	204	231	257	110
45°	106	116	140	176	204	84
55°	69	71	84	120	144	62
65°	44	45	53	64	78	44
75°	24	27	27	27	26	26
85°	7	8	8	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	366.6	366.6	366.6	366.6	366.6
2.5°	362.3	366.9	363.6	364.3	364.6
5°	354.6	359.4	358.8	361.7	364.6
7.5°	344.5	350.3	351.6	357.5	362.3
10°	332.8	339.3	342.6	352.0	358.1
12.5°	320.5	327.0	332.8	344.8	353.6
15°	306.9	314.3	321.8	336.4	347.1
17.5°	292.6	300.4	309.8	325.7	338.3
20°	277.7	285.5	296.5	313.7	328.6
22.5°	261.8	270.5	282.2	300.7	318.2
25°	245.6	254.3	267.0	287.4	306.5
27.5°	228.7	237.8	251.4	274.1	294.5
30°	211.5	221.2	235.8	259.8	281.9
32.5°	194.0	204.4	219.9	245.6	269.6
35°	177.1	186.8	204.0	231.3	256.6
37.5°	159.6	169.3	187.8	217.3	243.6
40°	140.8	151.5	172.3	202.7	230.3
42.5°	123.3	134.0	156.4	188.8	217.7
45°	106.4	116.5	140.5	175.5	204.4
47.5°	93.4	100.6	124.6	162.5	190.1
50°	84.7	87.9	109.6	148.2	174.8
52.5°	76.9	79.5	96.0	134.0	159.9
55°	69.4	71.4	84.3	119.7	144.4
57.5°	62.9	63.9	74.0	105.4	127.5
60°	56.1	57.4	66.2	90.8	110.9
62.5°	50.6	51.3	59.4	76.9	94.4
65°	44.4	45.4	52.6	63.6	78.5
67.5°	38.9	40.5	45.4	51.9	62.0
70°	33.7	36.0	38.9	42.2	47.7
72.5°	28.9	31.5	33.1	34.4	33.4
75°	24.0	26.9	26.9	27.2	26.3
77.5°	19.5	22.1	21.7	21.4	20.1
80°	14.9	17.2	16.5	16.2	14.9
82.5°	11.0	12.7	12.0	11.7	10.1
85°	6.8	8.4	8.1	7.8	6.5
87.5°	3.2	4.9	4.5	4.2	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)