

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: P1060452

Luminaire Tested: S124RDR-S350D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060452
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-S350D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

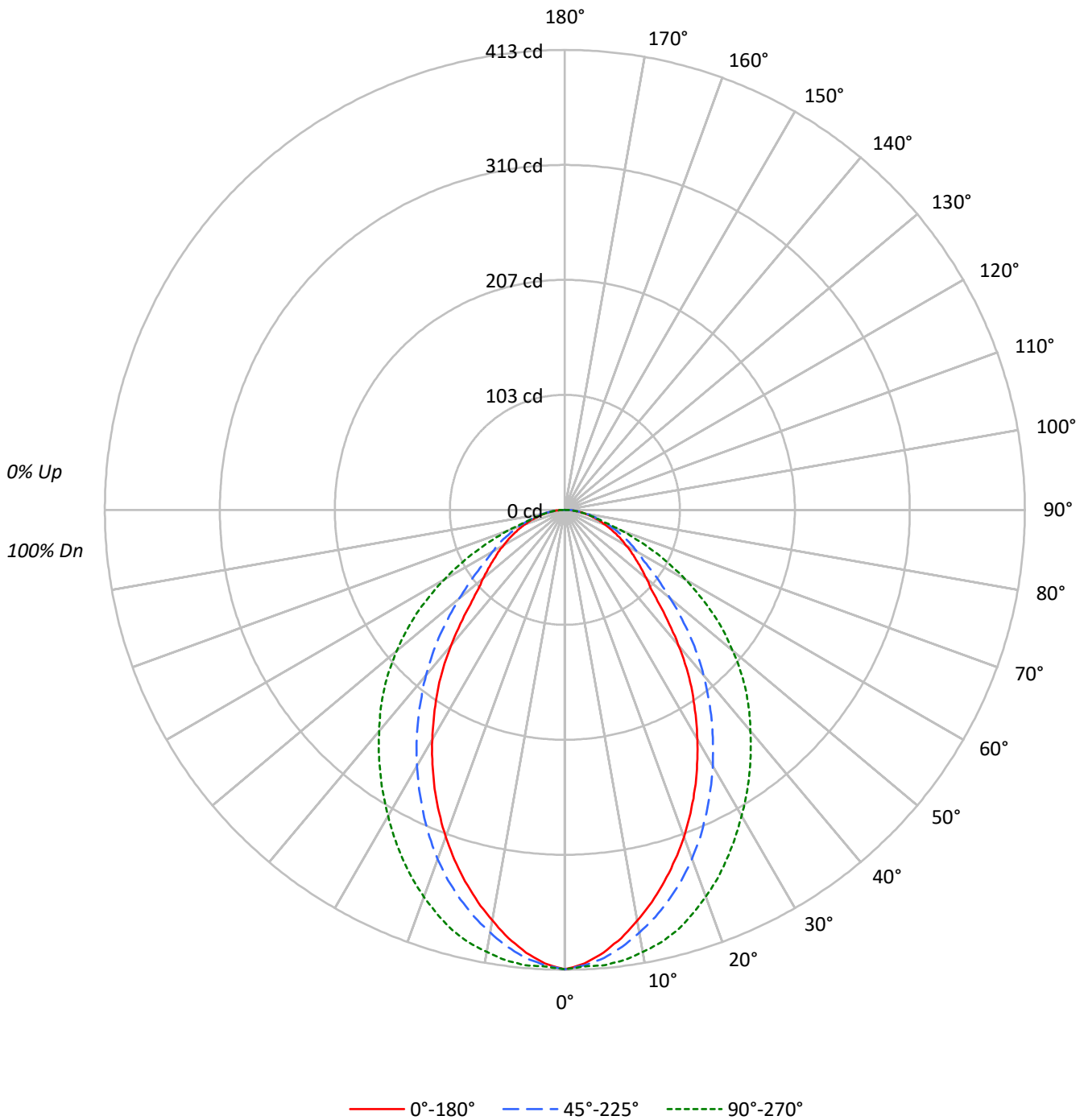
Lumens per Lamp: N/A
Luminaire Lumens: 757.1 lumens
Efficiency: N/A
Efficacy: 60.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				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°	3553	3553	3553
5°	3450	3491	3548
10°	3275	3372	3525
15°	3079	3229	3483
20°	2865	3058	3390
25°	2626	2855	3279
30°	2367	2640	3155
35°	2096	2415	3036
40°	1782	2180	2915
45°	1459	1925	2801
50°	1277	1653	2636
55°	1173	1425	2440
60°	1088	1283	2151
65°	1019	1206	1801
70°	957	1103	1352
75°	898	1008	985
80°	833	922	833
85°	761	899	721

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2801 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.1	5.0
10°-20°	102.6	13.6
20°-30°	140.2	18.5
30°-40°	147.4	19.5
40°-50°	127.9	16.9
50°-60°	96.5	12.7
60°-70°	62.5	8.3
70°-80°	32.1	4.2
80°-90°	9.7	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°	281.0	37.1
0°-40°	428.4	56.6
0°-60°	652.7	86.2
0°-90°	757.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	399	405	404	407	410	37
15°	345	354	362	379	391	97
25°	276	286	300	324	345	127
35°	199	210	230	260	289	124
45°	120	131	158	198	230	94
55°	78	80	95	135	162	70
65°	50	51	59	72	88	50
75°	27	30	30	31	30	29
85°	8	10	9	9	7	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	412.6	412.6	412.6	412.6	412.6
2.5°	407.9	413.0	409.3	410.1	410.4
5°	399.1	404.6	403.9	407.1	410.4
7.5°	387.8	394.4	395.8	402.4	407.9
10°	374.6	381.9	385.6	396.2	403.1
12.5°	360.8	368.1	374.6	388.2	398.0
15°	345.4	353.8	362.2	378.7	390.7
17.5°	329.4	338.1	348.7	366.6	380.8
20°	312.6	321.3	333.7	353.1	369.9
22.5°	294.7	304.5	317.7	338.5	358.2
25°	276.4	286.3	300.5	323.5	345.1
27.5°	257.4	267.7	283.0	308.5	331.6
30°	238.1	249.0	265.5	292.5	317.3
32.5°	218.4	230.0	247.6	276.4	303.4
35°	199.4	210.3	229.7	260.3	288.8
37.5°	179.7	190.6	211.4	244.6	274.2
40°	158.5	170.5	193.9	228.2	259.3
42.5°	138.8	150.8	176.0	212.5	245.0
45°	119.8	131.1	158.1	197.5	230.0
47.5°	105.2	113.2	140.2	182.9	214.0
50°	95.3	99.0	123.4	166.9	196.8
52.5°	86.5	89.5	108.1	150.8	180.0
55°	78.1	80.3	94.9	134.7	162.5
57.5°	70.8	71.9	83.3	118.7	143.5
60°	63.2	64.6	74.5	102.2	124.9
62.5°	57.0	57.7	66.8	86.5	106.3
65°	50.0	51.1	59.2	71.6	88.4
67.5°	43.8	45.6	51.1	58.4	69.7
70°	38.0	40.5	43.8	47.5	53.7
72.5°	32.5	35.4	37.2	38.7	37.6
75°	27.0	30.3	30.3	30.7	29.6
77.5°	21.9	24.8	24.5	24.1	22.6
80°	16.8	19.4	18.6	18.3	16.8
82.5°	12.4	14.2	13.5	13.1	11.3
85°	7.7	9.5	9.1	8.8	7.3
87.5°	3.7	5.5	5.1	4.7	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)