

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: P1060399

Luminaire Tested: S124RDR-S350D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

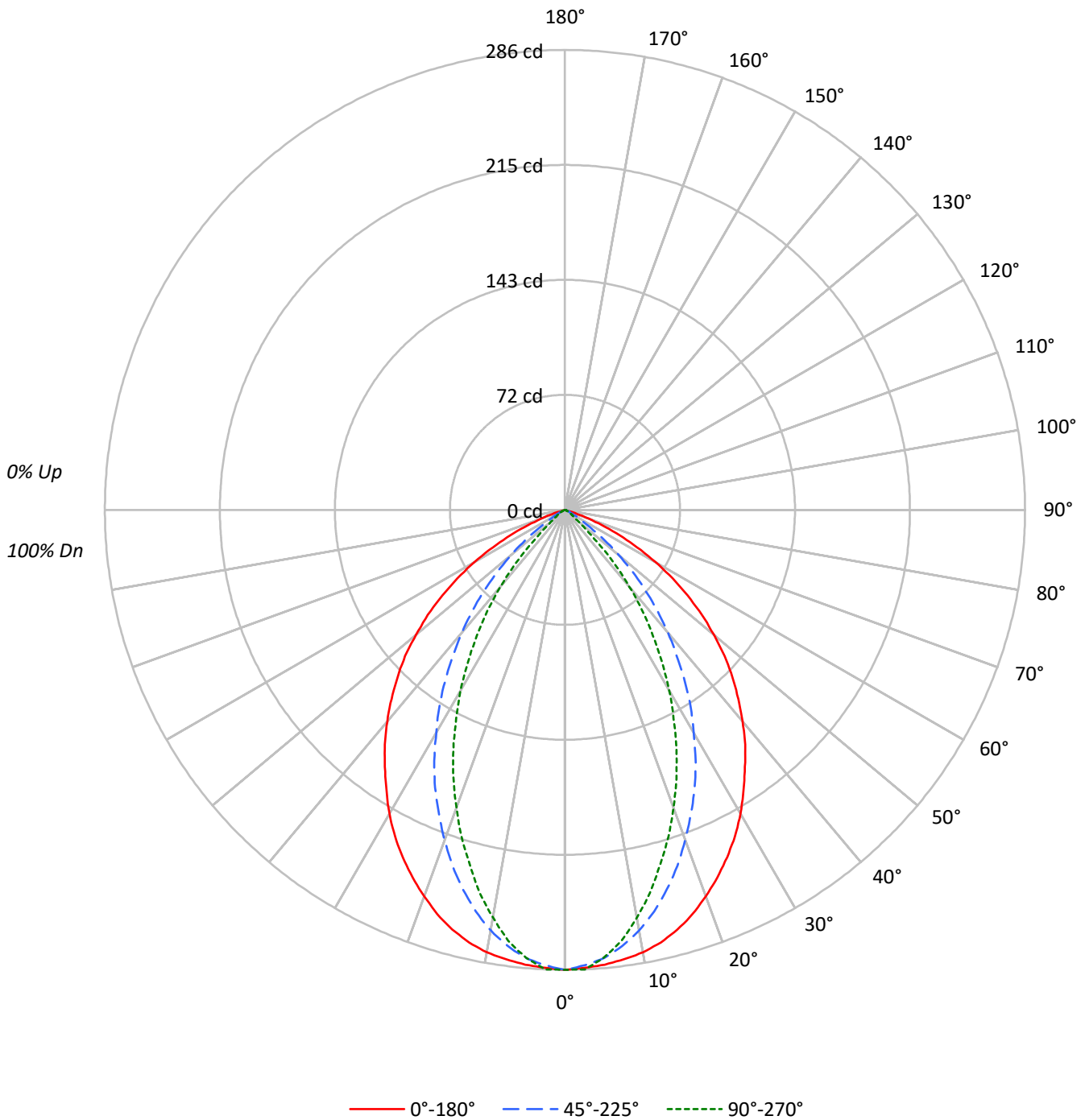
Lumens per Lamp: N/A
Luminaire Lumens: 373.4 lumens
Efficiency: N/A
Efficacy: 29.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2463	2463	2463
5°	2454	2419	2415
10°	2443	2323	2252
15°	2410	2181	2037
20°	2344	2003	1806
25°	2265	1814	1559
30°	2170	1590	1291
35°	2051	1364	1004
40°	1932	1120	701
45°	1791	861	347
50°	1617	581	117
55°	1396	297	81
60°	1118	107	57
65°	766	59	24
70°	342	30	20
75°	0	13	13
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1791 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	7.1
10°-20°	69.2	18.5
20°-30°	89.6	24.0
30°-40°	85.1	22.8
40°-50°	60.3	16.1
50°-60°	31.0	8.3
60°-70°	10.8	2.9
70°-80°	0.9	0.2
80°-90°	0.0	0.0
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°	185.2	49.6
0°-40°	270.4	72.4
0°-60°	361.6	96.9
0°-90°	373.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	373.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	286	286	286	286	286	
5°	284	284	280	280	279	27
15°	270	262	245	233	228	76
25°	238	220	191	171	164	110
35°	195	166	130	105	96	122
45°	147	113	71	40	28	113
55°	93	61	20	6	5	83
65°	38	18	3	2	1	37
75°	0	0	0	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	286.0	286.0	286.0	286.0	286.0
2.5°	285.1	286.0	283.5	285.6	286.0
5°	283.9	284.3	279.8	279.8	279.4
7.5°	281.8	281.0	273.6	270.7	270.3
10°	279.4	276.5	265.7	259.5	257.5
12.5°	275.6	270.3	255.8	246.7	244.2
15°	270.3	262.0	244.6	233.1	228.5
17.5°	263.7	252.9	232.2	218.2	213.6
20°	255.8	242.2	218.6	202.9	197.1
22.5°	247.5	231.8	204.6	186.8	181.0
25°	238.4	219.8	190.9	170.7	164.1
27.5°	228.9	207.0	176.0	155.0	146.3
30°	218.2	194.2	159.9	138.0	129.8
32.5°	206.6	180.2	145.5	121.9	112.0
35°	195.1	166.5	129.8	104.6	95.5
37.5°	183.9	153.7	114.1	87.6	78.9
40°	171.9	139.7	99.6	72.3	62.4
42.5°	159.5	126.0	84.7	56.6	45.9
45°	147.1	113.2	70.7	40.5	28.5
47.5°	134.7	99.6	57.0	25.6	15.3
50°	120.7	86.4	43.4	13.6	8.7
52.5°	107.4	74.0	31.0	7.9	6.6
55°	93.0	61.2	19.8	5.8	5.4
57.5°	79.3	48.8	11.2	4.5	4.1
60°	64.9	37.6	6.2	3.7	3.3
62.5°	50.4	27.3	4.1	2.5	2.1
65°	37.6	18.2	2.9	1.7	1.2
67.5°	24.8	10.3	2.1	0.8	0.8
70°	13.6	5.0	1.2	0.8	0.8
72.5°	5.0	1.7	0.8	0.4	0.4
75°	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)