

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: P1060487

Luminaire Tested: S124RDR-S575D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060487
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

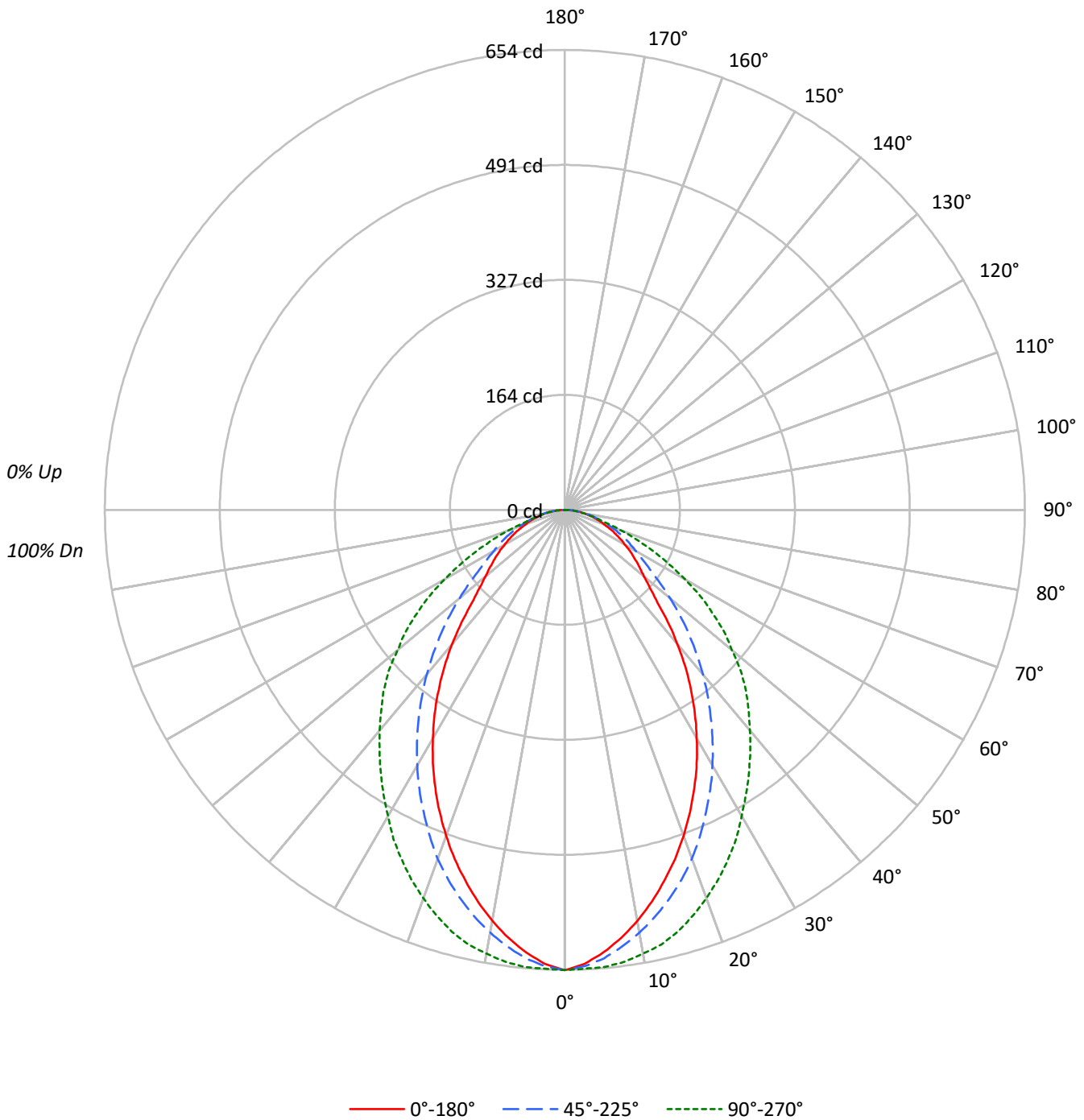
Lumens per Lamp: N/A
Luminaire Lumens: 1191.5 lumens
Efficiency: N/A
Efficacy: 60.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	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	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																																				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																																				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																																				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																																				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																																				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																																				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																																				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																																				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5636	5636	5636
5°	5461	5532	5639
10°	5189	5338	5602
15°	4868	5106	5534
20°	4520	4840	5387
25°	4139	4510	5214
30°	3731	4174	4999
35°	3288	3808	4796
40°	2799	3432	4603
45°	2272	3032	4436
50°	1967	2610	4154
55°	1823	2214	3852
60°	1702	1996	3379
65°	1593	1873	2810
70°	1485	1727	2125
75°	1414	1597	1530
80°	1329	1463	1294
85°	1215	1354	1018

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4436 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	5.1
10°-20°	162.4	13.6
20°-30°	221.8	18.6
30°-40°	232.3	19.5
40°-50°	201.1	16.9
50°-60°	151.1	12.7
60°-70°	97.5	8.2
70°-80°	50.0	4.2
80°-90°	14.9	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°	444.6	37.3
0°-40°	676.9	56.8
0°-60°	1029.2	86.4
0°-90°	1191.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1191.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	654	654	654	654	654	
5°	632	641	640	645	652	59
15°	546	560	573	599	621	153
25°	436	452	475	512	549	200
35°	313	331	362	410	456	195
45°	187	206	249	310	364	147
55°	121	126	148	211	257	109
65°	78	80	92	111	138	78
75°	42	47	48	47	46	45
85°	12	14	14	13	10	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	654.5	654.5	654.5	654.5	654.5
2.5°	646.2	654.5	649.6	651.0	653.1
5°	631.8	641.4	640.0	644.8	652.4
7.5°	614.0	624.3	626.3	637.3	648.3
10°	593.4	605.1	610.5	627.0	640.7
12.5°	570.8	583.1	592.7	613.3	633.2
15°	546.1	559.8	572.8	598.9	620.8
17.5°	520.7	534.4	551.5	580.4	605.1
20°	493.2	508.3	528.2	558.4	587.9
22.5°	465.1	480.9	502.2	535.1	569.4
25°	435.6	452.1	474.7	511.8	548.8
27.5°	406.1	422.6	448.0	487.1	527.5
30°	375.2	392.4	419.8	462.4	502.8
32.5°	344.4	362.9	391.0	436.3	479.5
35°	312.8	330.7	362.2	410.2	456.2
37.5°	281.3	299.8	333.4	384.8	432.9
40°	249.0	268.2	305.3	359.5	409.5
42.5°	216.8	237.4	276.5	333.4	386.2
45°	186.6	205.8	249.0	310.1	364.3
47.5°	164.0	177.0	221.6	287.4	339.6
50°	146.8	153.7	194.8	262.7	310.1
52.5°	133.8	138.6	170.1	236.0	286.1
55°	121.4	125.5	147.5	210.6	256.6
57.5°	110.4	112.5	130.3	185.9	228.4
60°	98.8	100.8	115.9	159.2	196.2
62.5°	88.5	89.9	104.3	133.8	166.7
65°	78.2	79.6	91.9	111.1	137.9
67.5°	68.6	70.7	80.3	90.6	109.8
70°	59.0	63.1	68.6	73.4	84.4
72.5°	50.8	54.9	57.6	59.0	59.7
75°	42.5	47.3	48.0	47.3	46.0
77.5°	34.3	38.4	38.4	37.0	35.7
80°	26.8	30.2	29.5	28.1	26.1
82.5°	19.9	22.0	21.3	19.9	17.8
85°	12.3	14.4	13.7	13.0	10.3
87.5°	6.2	8.2	7.5	6.9	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)