

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: P1059058

Luminaire Tested: S123RDR-S1000D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059058
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D935-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

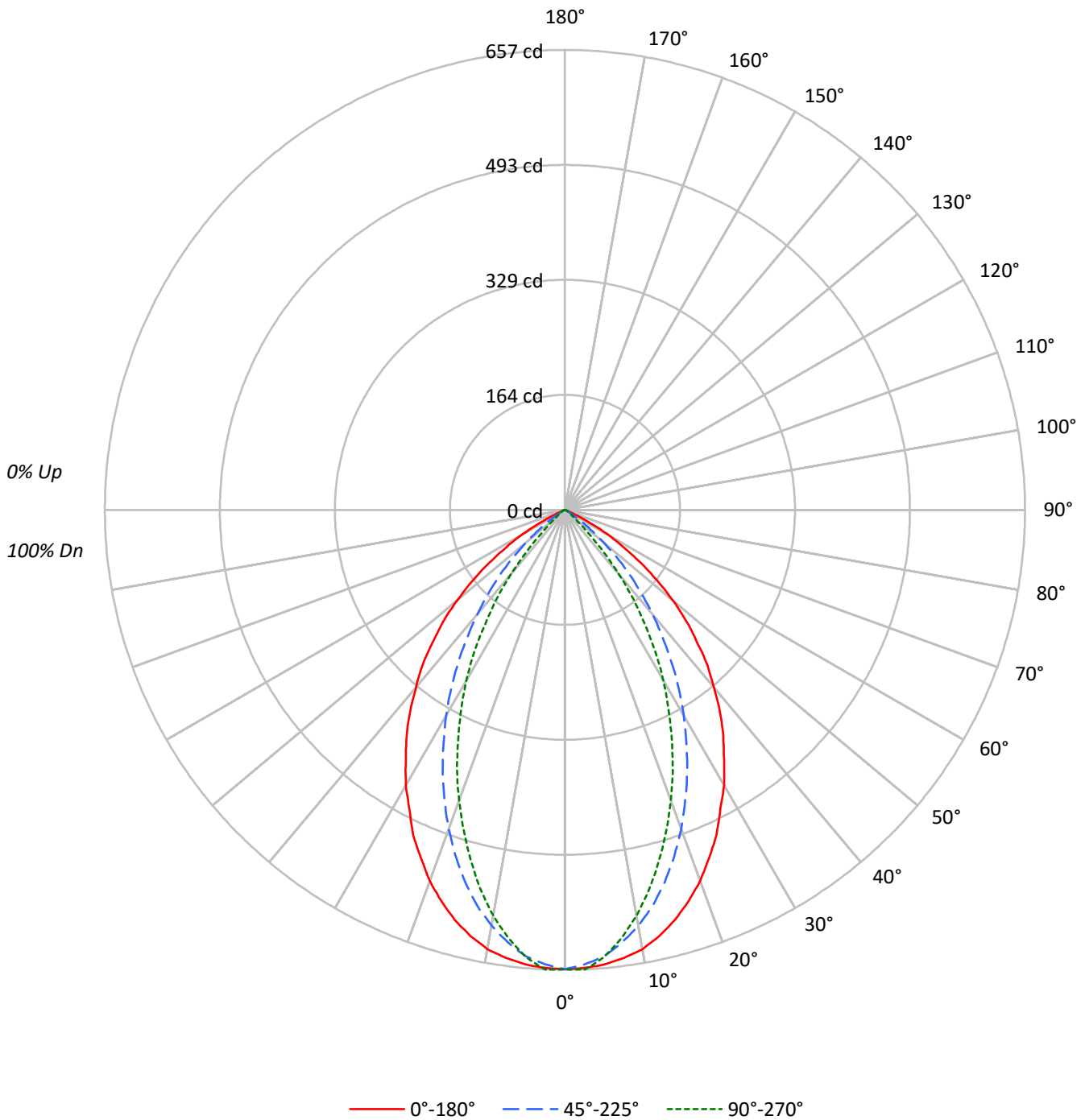
Lumens per Lamp: N/A
Luminaire Lumens: 748.8 lumens
Efficiency: N/A
Efficacy: 21.4 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	100	100	
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92	
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84	84	84	84	
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76	76	76	76	
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69	
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63	63	63	63	
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58	58	58	58	
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53	53	53	53	
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	49	
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46	46	46	46	
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42	42	42	42	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7705	7705	7705
5°	7685	7547	7560
10°	7598	7193	7018
15°	7373	6692	6307
20°	7052	6061	5520
25°	6640	5354	4668
30°	6161	4599	3811
35°	5649	3802	2833
40°	5069	2980	1813
45°	4422	2175	754
50°	3668	1293	289
55°	2704	540	217
60°	1637	200	124
65°	439	117	58
70°	0	38	38
75°	0	0	50
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4422 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	8.1
10°-20°	155.9	20.8
20°-30°	194.3	25.9
30°-40°	173.7	23.2
40°-50°	109.6	14.6
50°-60°	45.9	6.1
60°-70°	8.6	1.2
70°-80°	0.3	0.0
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°	410.6	54.8
0°-40°	584.3	78.0
0°-60°	739.9	98.8
0°-90°	748.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	748.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	656	656	656	656	656	
5°	652	651	640	642	641	62
15°	606	592	550	527	519	170
25°	512	471	413	377	360	235
35°	394	337	265	218	198	246
45°	266	207	131	70	45	205
55°	132	91	26	11	11	118
65°	16	12	4	2	2	22
75°	0	0	0	0	1	0
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°	656.2	656.2	656.2	656.2	656.2
2.5°	655.1	656.2	649.8	656.2	657.2
5°	652.0	650.9	640.3	642.4	641.4
7.5°	645.6	642.4	623.4	619.2	617.1
10°	637.2	628.7	603.3	592.8	588.6
12.5°	623.4	611.8	579.0	562.1	555.8
15°	606.5	591.7	550.5	527.3	518.8
17.5°	586.4	565.3	518.8	493.5	480.8
20°	564.3	534.7	485.0	454.4	441.7
22.5°	537.8	505.1	449.1	416.3	402.6
25°	512.5	471.3	413.2	377.2	360.3
27.5°	480.8	437.5	375.1	338.1	320.2
30°	454.4	404.7	339.2	298.0	281.1
32.5°	422.7	370.9	302.2	256.8	240.9
35°	394.1	337.1	265.2	217.7	197.6
37.5°	363.5	304.3	228.2	178.6	159.6
40°	330.7	271.6	194.4	139.5	118.3
42.5°	301.1	238.8	160.6	103.6	82.4
45°	266.3	207.1	131.0	69.7	45.4
47.5°	234.6	177.5	99.3	39.1	24.3
50°	200.8	146.9	70.8	20.1	15.8
52.5°	165.9	117.3	46.5	13.7	12.7
55°	132.1	90.9	26.4	10.6	10.6
57.5°	99.3	65.5	13.7	8.5	7.4
60°	69.7	43.3	8.5	6.3	5.3
62.5°	40.2	25.4	6.3	4.2	4.2
65°	15.8	11.6	4.2	2.1	2.1
67.5°	1.1	3.2	2.1	1.1	1.1
70°	0.0	0.0	1.1	1.1	1.1
72.5°	0.0	0.0	1.1	1.1	1.1
75°	0.0	0.0	0.0	0.0	1.1
77.5°	0.0	0.0	0.0	0.0	0.0
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)