

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: P1059141

Luminaire Tested: S123RDR-S1165D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059141
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

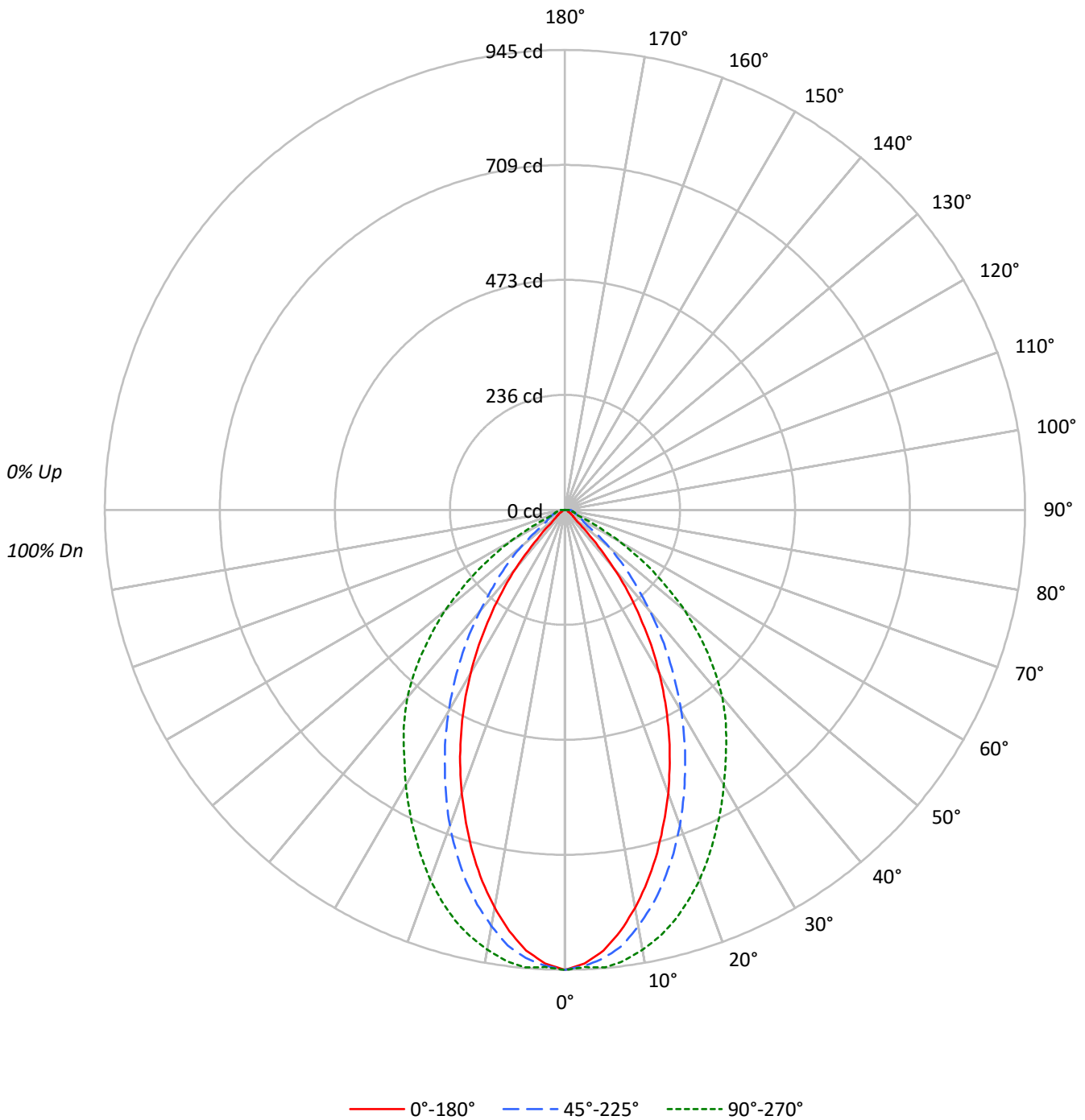
Lumens per Lamp: N/A
Luminaire Lumens: 1134.9 lumens
Efficiency: N/A
Efficacy: 27.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	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	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11099	11099	11099
5°	10717	10893	11127
10°	9893	10352	10945
15°	8879	9573	10615
20°	7745	8630	10104
25°	6534	7564	9479
30°	5254	6468	8858
35°	3846	5324	8280
40°	2399	4151	7710
45°	908	3094	6868
50°	431	2134	5855
55°	330	1169	4526
60°	233	991	2976
65°	172	864	1242
70°	172	810	810
75°	227	844	844
80°	338	1008	926
85°	674	1671	1334

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6868 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	7.6
10°-20°	222.5	19.6
20°-30°	275.4	24.3
30°-40°	246.9	21.8
40°-50°	161.9	14.3
50°-60°	81.0	7.1
60°-70°	31.6	2.8
70°-80°	17.8	1.6
80°-90°	11.0	1.0
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°	584.7	51.5
0°-40°	831.6	73.3
0°-60°	1074.5	94.7
0°-90°	1134.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1134.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	909	924	924	934	944	84
15°	730	760	788	840	873	203
25°	504	535	584	667	732	230
35°	268	304	371	483	578	167
45°	55	88	186	319	414	52
55°	16	20	57	156	221	15
65°	6	19	31	41	45	6
75°	5	19	19	19	19	5
85°	5	12	12	12	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	945.2	945.2	945.2	945.2	945.2
2.5°	932.8	946.5	937.8	939.0	940.3
5°	909.2	924.1	924.1	934.1	944.0
7.5°	873.2	890.6	903.0	920.4	934.1
10°	829.7	850.8	868.2	899.3	917.9
12.5°	782.5	808.6	831.0	872.0	898.0
15°	730.4	760.2	787.5	839.7	873.2
17.5°	674.5	704.3	740.3	801.2	842.1
20°	619.8	649.6	690.6	758.9	808.6
22.5°	562.7	593.7	637.2	713.0	771.3
25°	504.3	535.3	583.8	667.0	731.6
27.5°	445.9	477.0	531.6	622.3	693.1
30°	387.5	418.6	477.0	573.8	653.3
32.5°	329.2	362.7	423.6	529.1	613.6
35°	268.3	304.3	371.4	483.2	577.6
37.5°	212.4	245.9	321.7	443.4	541.6
40°	156.5	192.5	270.8	404.9	503.0
42.5°	101.9	140.4	224.8	362.7	459.6
45°	54.7	88.2	186.3	319.2	413.6
47.5°	29.8	48.4	150.3	273.3	366.4
50°	23.6	27.3	116.8	233.5	320.5
52.5°	19.9	22.4	83.2	196.3	269.5
55°	16.1	19.9	57.1	156.5	221.1
57.5°	13.7	17.4	44.7	121.7	172.7
60°	9.9	14.9	42.2	89.4	126.7
62.5°	7.5	16.1	37.3	62.1	83.2
65°	6.2	18.6	31.1	41.0	44.7
67.5°	5.0	19.9	27.3	26.1	26.1
70°	5.0	18.6	23.6	22.4	23.6
72.5°	5.0	19.9	21.1	19.9	21.1
75°	5.0	18.6	18.6	18.6	18.6
77.5°	5.0	17.4	17.4	16.1	16.1
80°	5.0	14.9	14.9	14.9	13.7
82.5°	5.0	13.7	13.7	13.7	11.2
85°	5.0	12.4	12.4	12.4	9.9
87.5°	3.7	11.2	12.4	11.2	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)