

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: P1057825

Luminaire Tested: S122RDR-S1005D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

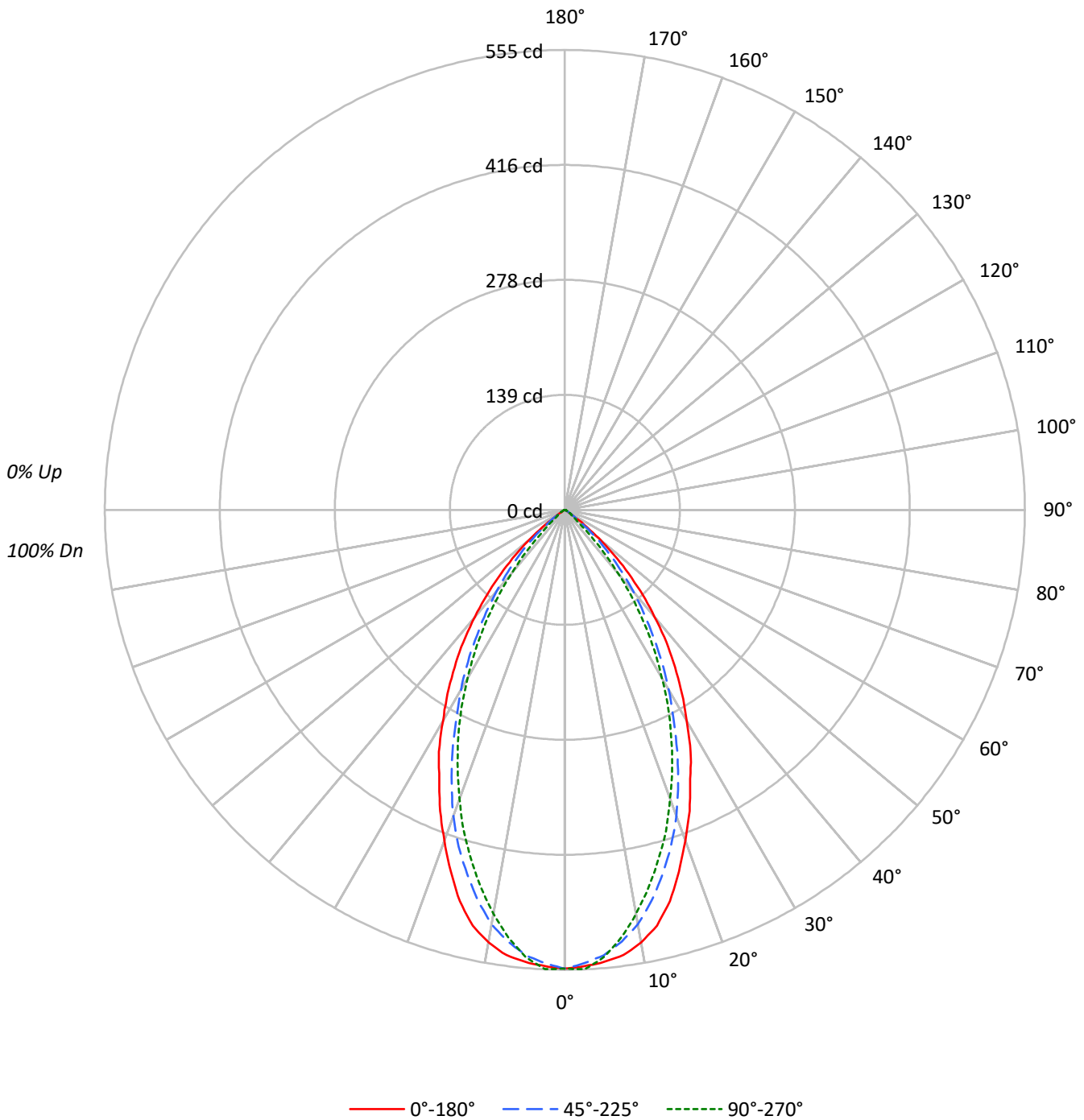
Lumens per Lamp: N/A
Luminaire Lumens: 520.6 lumens
Efficiency: N/A
Efficacy: 12.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86	86	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58	58	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54	54	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51	51	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47	47	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10215	10215	10215
5°	10145	9993	10038
10°	9934	9517	9277
15°	9345	8698	8339
20°	8342	7721	7285
25°	7291	6529	6196
30°	6260	5337	4988
35°	5219	4165	3744
40°	4059	3074	2397
45°	2839	2046	1039
50°	1544	1077	370
55°	225	376	264
60°	44	85	173
65°	0	52	100
70°	0	0	65
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2839 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	9.8
10°-20°	128.2	24.6
20°-30°	149.4	28.7
30°-40°	119.8	23.0
40°-50°	59.5	11.4
50°-60°	11.7	2.3
60°-70°	1.0	0.2
70°-80°	0.1	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°	328.4	63.1
0°-40°	448.2	86.1
0°-60°	519.4	99.8
0°-90°	520.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	520.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	554	554	554	554	554	
5°	548	548	540	541	542	52
15°	489	480	455	444	436	136
25°	358	341	321	314	304	165
35°	232	208	185	177	166	144
45°	109	96	78	53	40	84
55°	7	14	12	7	8	14
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	553.6	553.6	553.6	553.6	553.6
2.5°	551.2	553.6	547.7	553.6	554.7
5°	547.7	547.7	539.5	540.7	541.9
7.5°	541.9	539.5	525.5	523.1	520.8
10°	530.2	525.5	507.9	498.6	495.1
12.5°	513.8	506.8	483.4	472.8	467.0
15°	489.2	479.8	455.3	443.6	436.5
17.5°	457.6	449.4	426.0	413.1	406.1
20°	424.8	413.1	393.2	380.4	371.0
22.5°	393.2	378.0	357.0	347.6	338.2
25°	358.1	340.6	320.7	313.7	304.3
27.5°	328.9	306.6	283.2	278.5	270.3
30°	293.8	272.7	250.5	243.4	234.1
32.5°	263.3	239.9	217.7	209.5	201.3
35°	231.7	208.3	184.9	176.7	166.2
37.5°	201.3	179.1	155.7	142.8	133.4
40°	168.5	149.8	127.6	111.2	99.5
42.5°	139.3	122.9	101.8	80.8	69.1
45°	108.8	96.0	78.4	52.7	39.8
47.5°	80.8	71.4	57.3	30.4	21.1
50°	53.8	50.3	37.5	15.2	12.9
52.5°	29.3	31.6	22.2	9.4	10.5
55°	7.0	14.0	11.7	7.0	8.2
57.5°	1.2	2.3	5.9	5.9	5.9
60°	1.2	1.2	2.3	3.5	4.7
62.5°	1.2	0.0	1.2	2.3	3.5
65°	0.0	0.0	1.2	1.2	2.3
67.5°	0.0	0.0	0.0	1.2	1.2
70°	0.0	0.0	0.0	1.2	1.2
72.5°	0.0	0.0	0.0	0.0	1.2
75°	0.0	0.0	0.0	0.0	0.0
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)