

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: P1057993

Luminaire Tested: S122RDR-S485D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D927-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

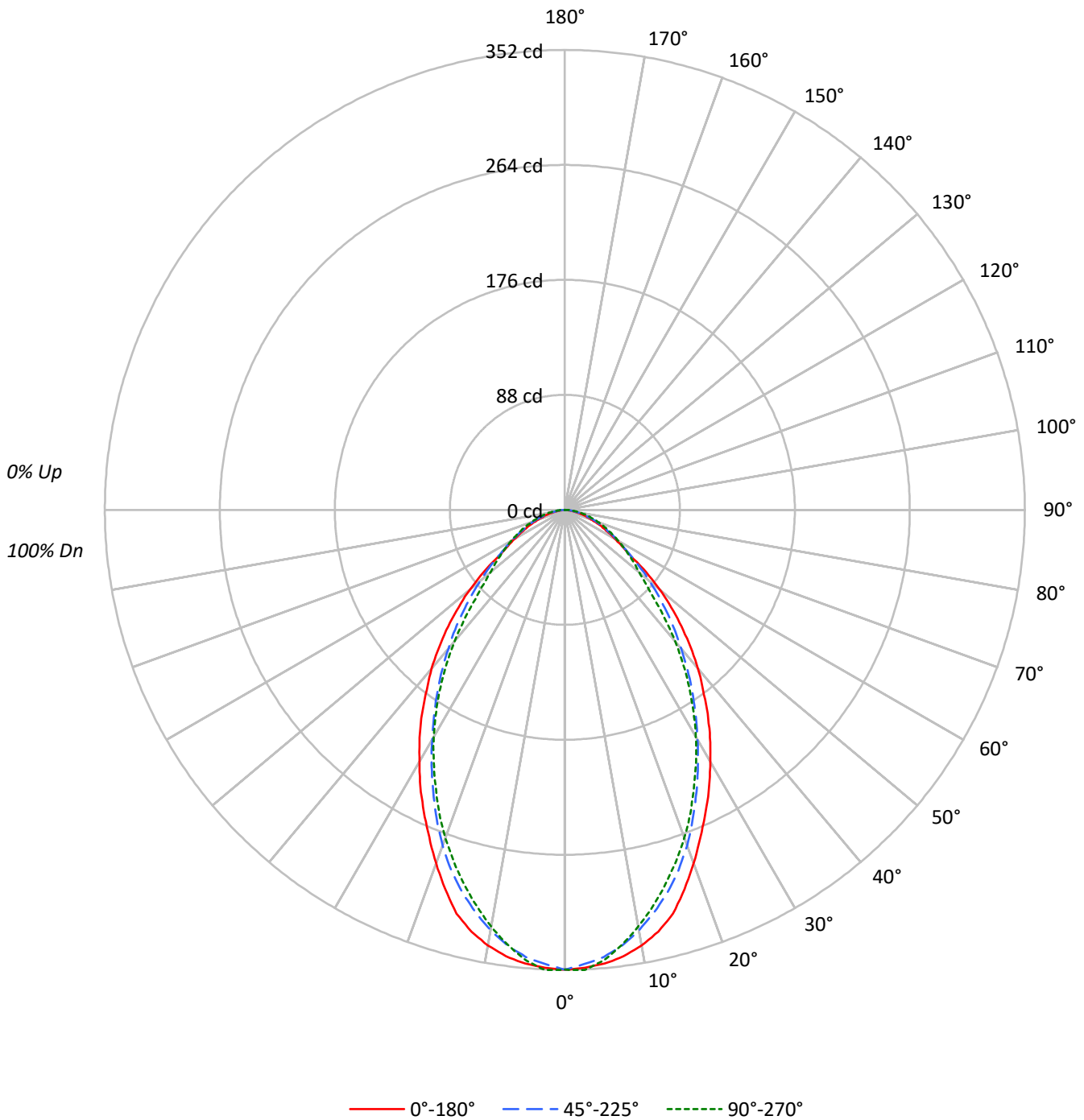
Lumens per Lamp: N/A
Luminaire Lumens: 534.5 lumens
Efficiency: N/A
Efficacy: 27.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6493	6493	6493
5°	6457	6363	6405
10°	6343	6121	6069
15°	6113	5792	5674
20°	5657	5371	5249
25°	5192	4850	4758
30°	4741	4323	4274
35°	4291	3825	3737
40°	3820	3334	3158
45°	3291	2865	2531
50°	2719	2414	2124
55°	1966	2001	1911
60°	1635	1716	1738
65°	1393	1493	1589
70°	1149	1333	1451
75°	955	1119	1319
80°	712	893	1190
85°	233	466	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3291 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	6.1
10°-20°	85.7	16.0
20°-30°	110.9	20.7
30°-40°	108.7	20.3
40°-50°	85.6	16.0
50°-60°	56.1	10.5
60°-70°	34.2	6.4
70°-80°	17.1	3.2
80°-90°	3.7	0.7
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°	229.1	42.9
0°-40°	337.8	63.2
0°-60°	479.6	89.7
0°-90°	534.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	534.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	352	352	352	352	352	
5°	349	349	344	346	346	33
15°	320	316	303	299	297	89
25°	255	247	238	237	234	117
35°	190	180	170	169	166	119
45°	126	118	110	102	97	97
55°	61	64	62	60	59	58
65°	32	32	34	36	36	32
75°	13	14	16	18	18	14
85°	1	2	2	4	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	351.9	351.9	351.9	351.9	351.9
2.5°	350.8	351.4	348.0	351.4	352.5
5°	348.6	348.6	343.5	345.8	345.8
7.5°	344.7	344.1	336.2	336.2	335.7
10°	338.5	336.2	326.7	325.0	323.9
12.5°	330.6	326.7	315.5	312.7	311.0
15°	320.0	315.5	303.2	299.3	297.0
17.5°	304.3	299.8	289.2	284.7	282.4
20°	288.1	281.3	273.5	269.6	267.3
22.5°	271.2	263.4	256.1	253.3	251.1
25°	255.0	246.6	238.2	237.1	233.7
27.5°	239.3	229.2	220.8	220.2	217.4
30°	222.5	211.8	202.9	203.4	200.6
32.5°	206.8	196.7	186.1	186.6	183.3
35°	190.5	179.9	169.8	169.2	165.9
37.5°	173.7	163.6	154.1	151.9	148.5
40°	158.6	148.5	138.4	134.5	131.1
42.5°	142.3	133.4	124.4	118.2	113.8
45°	126.1	118.2	109.8	102.0	97.0
47.5°	110.4	104.2	97.0	87.4	84.1
50°	94.7	90.2	84.1	75.7	74.0
52.5°	78.5	76.8	72.9	67.2	66.7
55°	61.1	64.4	62.2	60.0	59.4
57.5°	51.6	52.1	53.8	53.2	53.2
60°	44.3	44.3	46.5	47.1	47.1
62.5°	37.5	38.1	40.3	41.5	41.5
65°	31.9	32.5	34.2	35.9	36.4
67.5°	26.3	27.5	29.1	30.8	31.4
70°	21.3	22.4	24.7	26.3	26.9
72.5°	17.4	17.9	20.2	21.9	22.4
75°	13.4	14.0	15.7	17.9	18.5
77.5°	9.5	10.6	12.3	14.0	15.1
80°	6.7	7.3	8.4	10.6	11.2
82.5°	3.9	4.5	5.6	7.3	7.8
85°	1.1	1.7	2.2	3.9	5.0
87.5°	0.0	0.0	0.0	1.1	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)