

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: P1057998

Luminaire Tested: S122RDR-S485D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

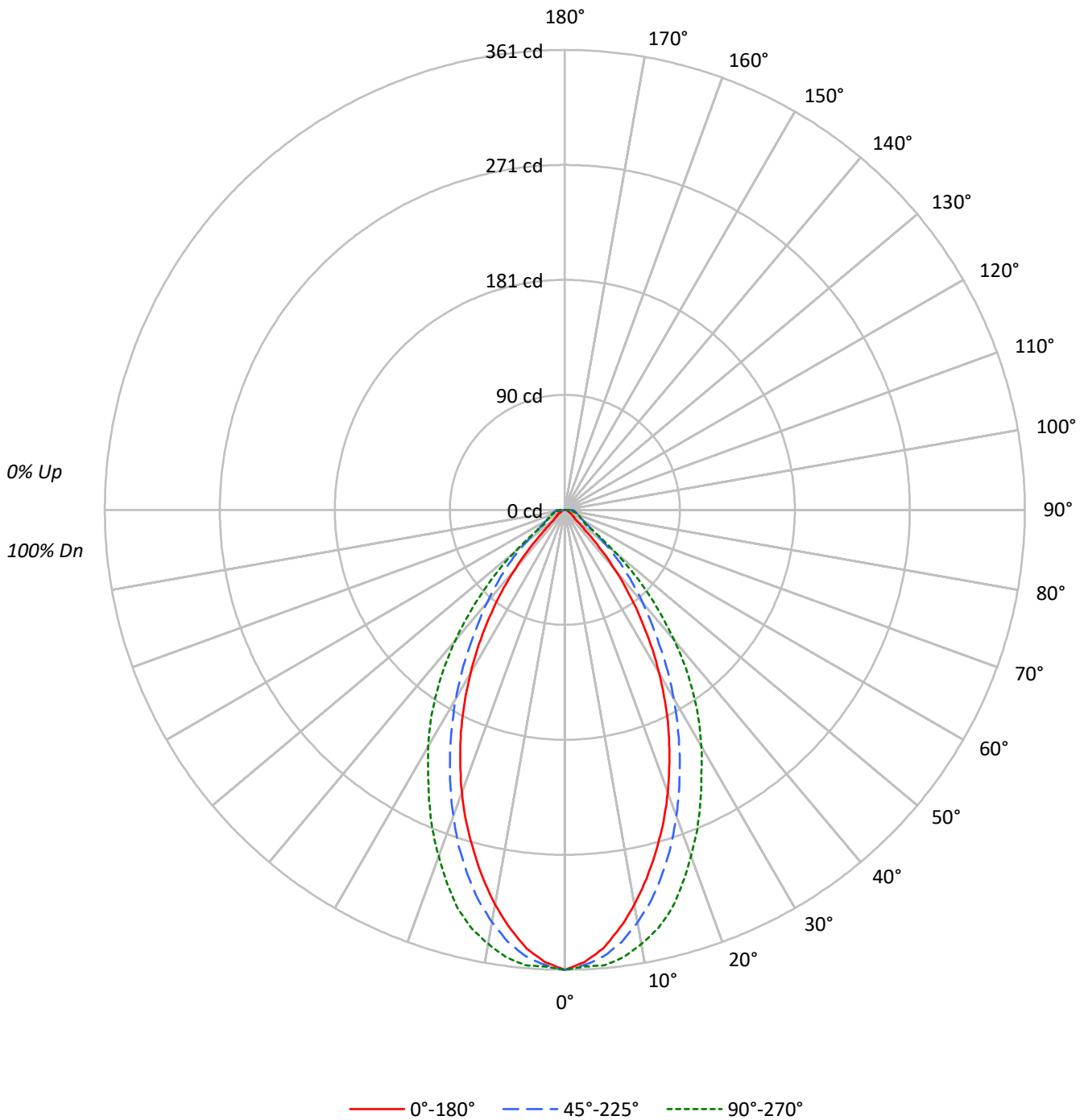
Lumens per Lamp: N/A
Luminaire Lumens: 393.0 lumens
Efficiency: N/A
Efficacy: 20.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6663	6663	6663
5°	6400	6516	6646
10°	5898	6159	6483
15°	5286	5651	6191
20°	4640	5025	5683
25°	3929	4341	5129
30°	3151	3644	4566
35°	2329	2915	3956
40°	1462	2281	3213
45°	574	1720	2383
50°	281	1160	1458
55°	222	762	650
60°	170	620	598
65°	127	581	581
70°	156	593	593
75°	164	656	620
80°	244	861	680
85°	487	1461	974

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 2707 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.0	8.4
10°-20°	83.4	21.2
20°-30°	99.7	25.4
30°-40°	83.9	21.4
40°-50°	47.8	12.2
50°-60°	18.8	4.8
60°-70°	11.9	3.0
70°-80°	8.8	2.2
80°-90°	5.6	1.4
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°	216.1	55.0
0°-40°	300.0	76.3
0°-60°	366.7	93.3
0°-90°	393.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	393.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	361	361	361	361	361	
5°	346	353	352	356	359	32
15°	277	286	296	313	324	77
25°	193	202	213	235	252	88
35°	103	113	129	157	176	64
45°	22	39	66	83	91	21
55°	7	15	24	24	20	6
65°	3	13	13	13	13	3
75°	2	9	9	9	9	3
85°	2	6	7	6	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	361.1	361.1	361.1	361.1	361.1
2.5°	355.3	361.6	357.6	358.2	358.8
5°	345.5	353.0	351.8	355.9	358.8
7.5°	331.0	339.1	342.0	348.9	354.1
10°	314.8	324.1	328.7	339.7	346.0
12.5°	296.4	306.8	313.7	327.6	336.8
15°	276.7	286.5	295.8	313.1	324.1
17.5°	257.1	266.9	276.7	295.8	307.3
20°	236.3	245.5	255.9	276.1	289.4
22.5°	214.3	224.1	234.5	255.3	271.5
25°	193.0	201.6	213.2	235.1	251.9
27.5°	170.4	179.1	191.8	214.3	232.2
30°	147.9	156.6	171.0	194.1	214.3
32.5°	125.4	134.6	150.2	175.6	195.8
35°	103.4	112.7	129.4	157.1	175.6
37.5°	82.0	92.4	110.9	138.1	155.4
40°	60.7	72.8	94.7	119.0	133.4
42.5°	40.4	55.5	79.7	99.9	112.1
45°	22.0	38.7	65.9	82.6	91.3
47.5°	12.1	24.8	52.6	65.9	71.1
50°	9.8	17.3	40.4	50.3	50.8
52.5°	8.1	15.6	30.0	35.8	32.9
55°	6.9	15.0	23.7	24.3	20.2
57.5°	5.8	14.4	19.6	17.3	17.3
60°	4.6	14.4	16.8	15.6	16.2
62.5°	3.5	14.4	15.0	13.9	14.4
65°	2.9	13.3	13.3	12.7	13.3
67.5°	2.9	12.1	12.1	11.6	12.1
70°	2.9	11.6	11.0	11.0	11.0
72.5°	2.3	10.4	10.4	9.8	9.8
75°	2.3	9.2	9.2	8.7	8.7
77.5°	2.3	8.7	8.7	8.1	7.5
80°	2.3	7.5	8.1	7.5	6.4
82.5°	2.3	6.9	7.5	6.9	5.2
85°	2.3	6.4	6.9	6.4	4.6
87.5°	1.7	6.4	6.4	5.2	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)