

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: P1058014

Luminaire Tested: S122RDR-S485D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058014
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-S485D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

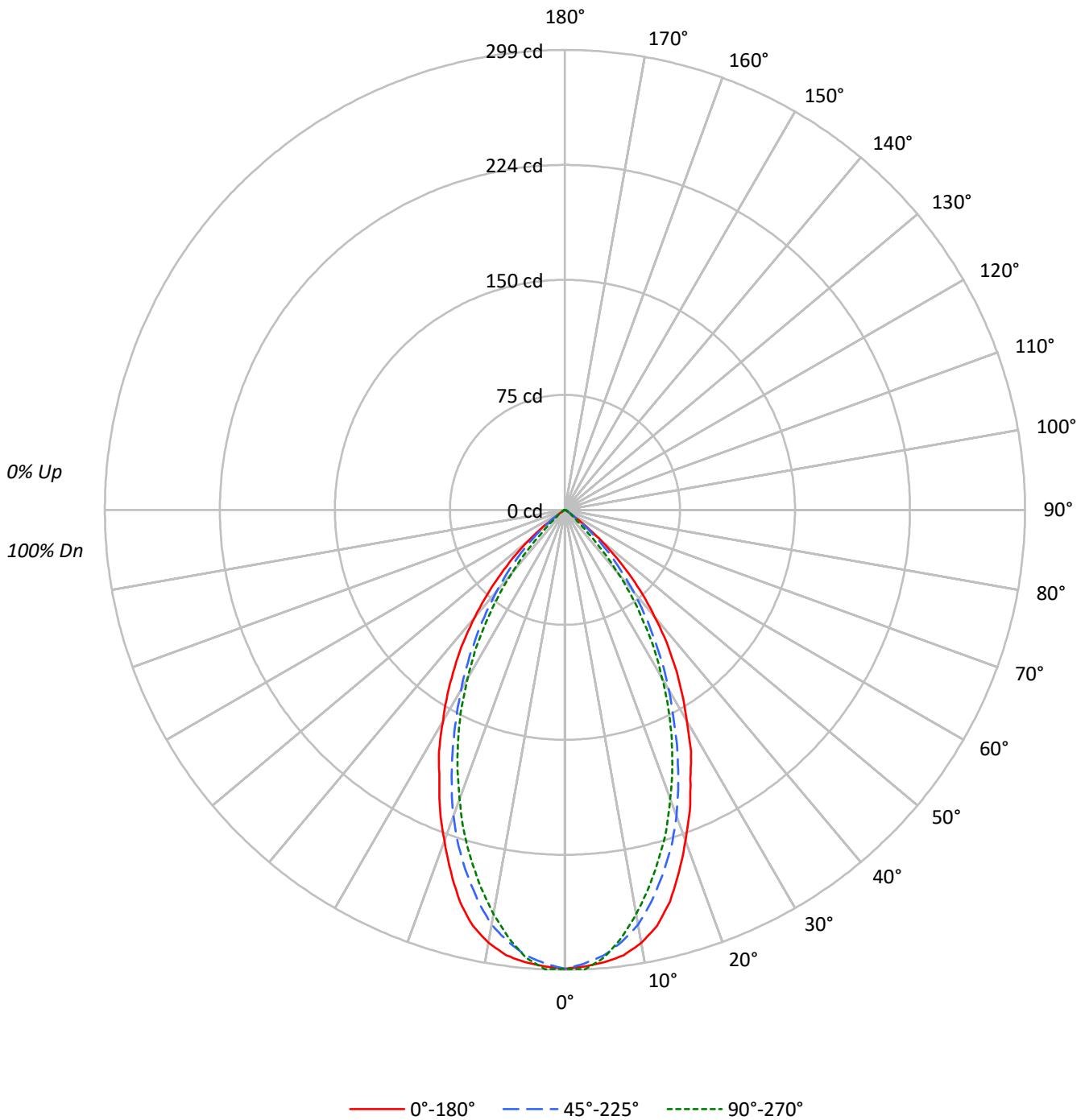
Lumens per Lamp: N/A
Luminaire Lumens: 280.6 lumens
Efficiency: N/A
Efficacy: 14.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5506	5506	5506
5°	5468	5386	5411
10°	5355	5130	4999
15°	5038	4688	4495
20°	4497	4161	3927
25°	3929	3518	3339
30°	3373	2876	2689
35°	2814	2246	2018
40°	2187	1657	1291
45°	1532	1104	558
50°	833	580	198
55°	122	203	142
60°	22	48	92
65°	0	26	57
70°	0	0	32
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1532 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.4	9.8
10°-20°	69.1	24.6
20°-30°	80.5	28.7
30°-40°	64.5	23.0
40°-50°	32.1	11.4
50°-60°	6.3	2.3
60°-70°	0.6	0.2
70°-80°	0.0	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°	177.0	63.1
0°-40°	241.6	86.1
0°-60°	280.0	99.8
0°-90°	280.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	280.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	298	298	298	298	298	
5°	295	295	291	291	292	28
15°	264	259	245	239	235	73
25°	193	184	173	169	164	89
35°	125	112	100	95	90	78
45°	59	52	42	28	21	45
55°	4	8	6	4	4	8
65°	0	0	1	1	1	0
75°	0	0	0	0	0	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°	298.4	298.4	298.4	298.4	298.4
2.5°	297.1	298.4	295.2	298.4	299.0
5°	295.2	295.2	290.8	291.4	292.1
7.5°	292.1	290.8	283.2	282.0	280.7
10°	285.8	283.2	273.8	268.7	266.8
12.5°	276.9	273.1	260.5	254.8	251.7
15°	263.7	258.6	245.4	239.1	235.3
17.5°	246.6	242.2	229.6	222.7	218.9
20°	229.0	222.7	211.9	205.0	200.0
22.5°	211.9	203.7	192.4	187.3	182.3
25°	193.0	183.6	172.8	169.1	164.0
27.5°	177.3	165.3	152.7	150.1	145.7
30°	158.3	147.0	135.0	131.2	126.2
32.5°	141.9	129.3	117.3	112.9	108.5
35°	124.9	112.3	99.7	95.3	89.6
37.5°	108.5	96.5	83.9	77.0	71.9
40°	90.8	80.7	68.8	59.9	53.6
42.5°	75.1	66.2	54.9	43.5	37.2
45°	58.7	51.7	42.3	28.4	21.4
47.5°	43.5	38.5	30.9	16.4	11.4
50°	29.0	27.1	20.2	8.2	6.9
52.5°	15.8	17.0	12.0	5.0	5.7
55°	3.8	7.6	6.3	3.8	4.4
57.5°	0.6	1.3	3.2	3.2	3.2
60°	0.6	0.6	1.3	1.9	2.5
62.5°	0.6	0.0	0.6	1.3	1.9
65°	0.0	0.0	0.6	0.6	1.3
67.5°	0.0	0.0	0.0	0.6	0.6
70°	0.0	0.0	0.0	0.6	0.6
72.5°	0.0	0.0	0.0	0.0	0.6
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)