

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: P1057969

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057969
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-S485D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

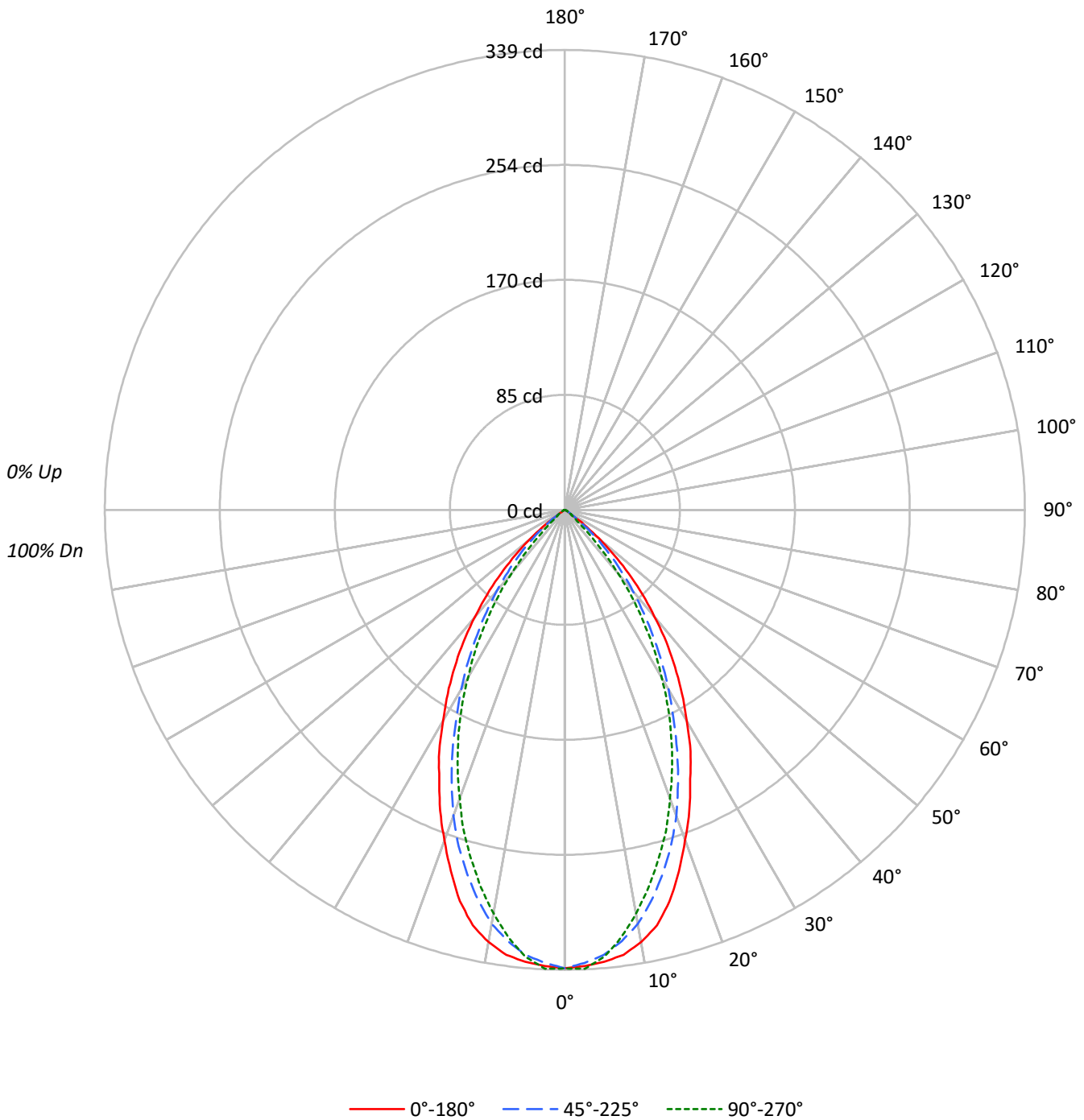
Lumens per Lamp: N/A
Luminaire Lumens: 317.8 lumens
Efficiency: N/A
Efficacy: 16.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	6235	6235	6235
5°	6192	6100	6127
10°	6063	5809	5662
15°	5704	5309	5091
20°	5092	4713	4448
25°	4451	3984	3781
30°	3820	3258	3045
35°	3185	2543	2284
40°	2479	1876	1462
45°	1733	1250	634
50°	944	657	227
55°	138	228	161
60°	26	52	107
65°	0	31	61
70°	0	0	38
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1733 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	9.8
10°-20°	78.2	24.6
20°-30°	91.2	28.7
30°-40°	73.1	23.0
40°-50°	36.3	11.4
50°-60°	7.2	2.3
60°-70°	0.6	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°	200.5	63.1
0°-40°	273.6	86.1
0°-60°	317.1	99.8
0°-90°	317.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	317.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	338	338	338	338	338	
5°	334	334	329	330	331	32
15°	299	293	278	271	266	83
25°	219	208	196	192	186	101
35°	141	127	113	108	101	88
45°	66	59	48	32	24	51
55°	4	9	7	4	5	9
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°	337.9	337.9	337.9	337.9	337.9
2.5°	336.5	337.9	334.3	337.9	338.6
5°	334.3	334.3	329.3	330.0	330.8
7.5°	330.8	329.3	320.8	319.3	317.9
10°	323.6	320.8	310.0	304.3	302.2
12.5°	313.6	309.3	295.0	288.6	285.0
15°	298.6	292.9	277.9	270.8	266.5
17.5°	279.3	274.3	260.0	252.2	247.9
20°	259.3	252.2	240.0	232.2	226.5
22.5°	240.0	230.7	217.9	212.2	206.5
25°	218.6	207.9	195.7	191.5	185.7
27.5°	200.7	187.2	172.9	170.0	165.0
30°	179.3	166.5	152.9	148.6	142.9
32.5°	160.7	146.4	132.9	127.9	122.9
35°	141.4	127.2	112.9	107.9	101.4
37.5°	122.9	109.3	95.0	87.2	81.4
40°	102.9	91.4	77.9	67.9	60.7
42.5°	85.0	75.0	62.2	49.3	42.1
45°	66.4	58.6	47.9	32.1	24.3
47.5°	49.3	43.6	35.0	18.6	12.9
50°	32.9	30.7	22.9	9.3	7.9
52.5°	17.9	19.3	13.6	5.7	6.4
55°	4.3	8.6	7.1	4.3	5.0
57.5°	0.7	1.4	3.6	3.6	3.6
60°	0.7	0.7	1.4	2.1	2.9
62.5°	0.7	0.0	0.7	1.4	2.1
65°	0.0	0.0	0.7	0.7	1.4
67.5°	0.0	0.0	0.0	0.7	0.7
70°	0.0	0.0	0.0	0.7	0.7
72.5°	0.0	0.0	0.0	0.0	0.7
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)