

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: P1058021

Luminaire Tested: S122RDR-S485D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

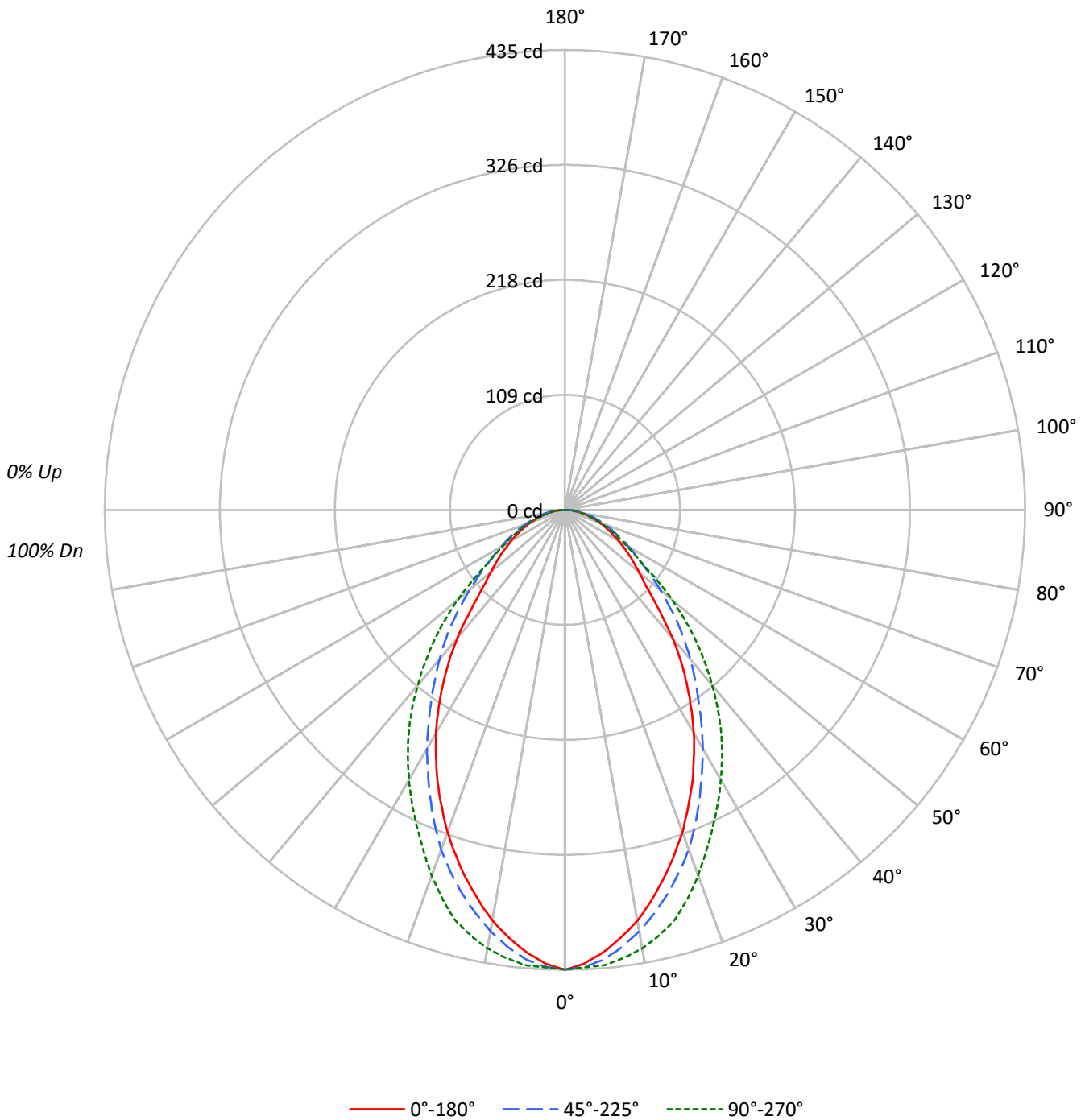
Lumens per Lamp: N/A
Luminaire Lumens: 708.3 lumens
Efficiency: N/A
Efficacy: 36.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8025	8025	8025
5°	7776	7904	8009
10°	7392	7581	7890
15°	6898	7175	7670
20°	6372	6718	7226
25°	5797	6130	6735
30°	5193	5555	6281
35°	4521	4963	5803
40°	3816	4439	5215
45°	3032	3920	4564
50°	2609	3370	3786
55°	2377	2883	2905
60°	2166	2561	2469
65°	1987	2314	2179
70°	1840	2147	1942
75°	1711	2025	1711
80°	1615	1945	1541
85°	1609	2011	1334

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4564 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	5.7
10°-20°	106.1	15.0
20°-30°	139.7	19.7
30°-40°	140.5	19.8
40°-50°	113.8	16.1
50°-60°	78.4	11.1
60°-70°	51.3	7.2
70°-80°	28.6	4.0
80°-90°	9.7	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°	286.0	40.4
0°-40°	426.4	60.2
0°-60°	618.7	87.3
0°-90°	708.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	708.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	435	435	435	435	435	
5°	420	428	427	429	432	39
15°	361	370	376	390	402	101
25°	285	292	301	314	331	130
35°	201	210	220	240	258	125
45°	116	129	150	164	175	92
55°	74	82	90	92	90	66
65°	46	54	53	50	50	45
75°	24	30	28	25	24	26
85°	8	10	10	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	434.9	434.9	434.9	434.9	434.9
2.5°	429.3	436.8	432.4	432.4	433.1
5°	419.8	428.0	426.7	428.6	432.4
7.5°	407.8	416.6	416.6	422.3	427.4
10°	394.5	403.4	404.6	413.5	421.1
12.5°	378.1	387.0	390.8	402.1	412.2
15°	361.1	369.9	375.6	389.5	401.5
17.5°	342.8	351.6	359.2	373.7	385.7
20°	324.5	332.7	342.1	354.8	368.0
22.5°	304.3	313.1	321.9	333.9	349.1
25°	284.7	292.3	301.1	314.4	330.8
27.5°	263.9	272.1	280.3	296.1	313.1
30°	243.7	251.9	260.7	277.1	294.8
32.5°	222.2	231.0	239.9	258.2	276.5
35°	200.7	210.2	220.3	239.9	257.6
37.5°	179.9	190.0	202.0	222.2	237.4
40°	158.4	169.2	184.3	202.0	216.5
42.5°	135.7	149.0	167.3	182.4	195.7
45°	116.2	129.4	150.2	163.5	174.9
47.5°	101.6	112.4	132.6	143.9	153.4
50°	90.9	99.1	117.4	125.6	131.9
52.5°	82.1	90.3	102.9	108.6	110.5
55°	73.9	82.1	89.6	91.5	90.3
57.5°	65.7	74.5	78.9	77.0	77.0
60°	58.7	68.2	69.4	66.9	66.9
62.5°	51.8	61.2	61.2	58.1	58.1
65°	45.5	54.3	53.0	50.5	49.9
67.5°	39.8	48.0	46.1	43.6	42.9
70°	34.1	41.7	39.8	36.6	36.0
72.5°	29.0	36.0	33.5	30.9	29.7
75°	24.0	29.7	28.4	25.3	24.0
77.5°	19.6	24.0	22.7	20.2	18.9
80°	15.2	18.9	18.3	15.8	14.5
82.5°	11.4	14.5	13.9	12.0	10.1
85°	7.6	10.1	9.5	8.2	6.3
87.5°	3.8	6.9	6.3	5.7	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)