

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: P1055223

Luminaire Tested: S122R3DR-S485D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055223
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S485D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

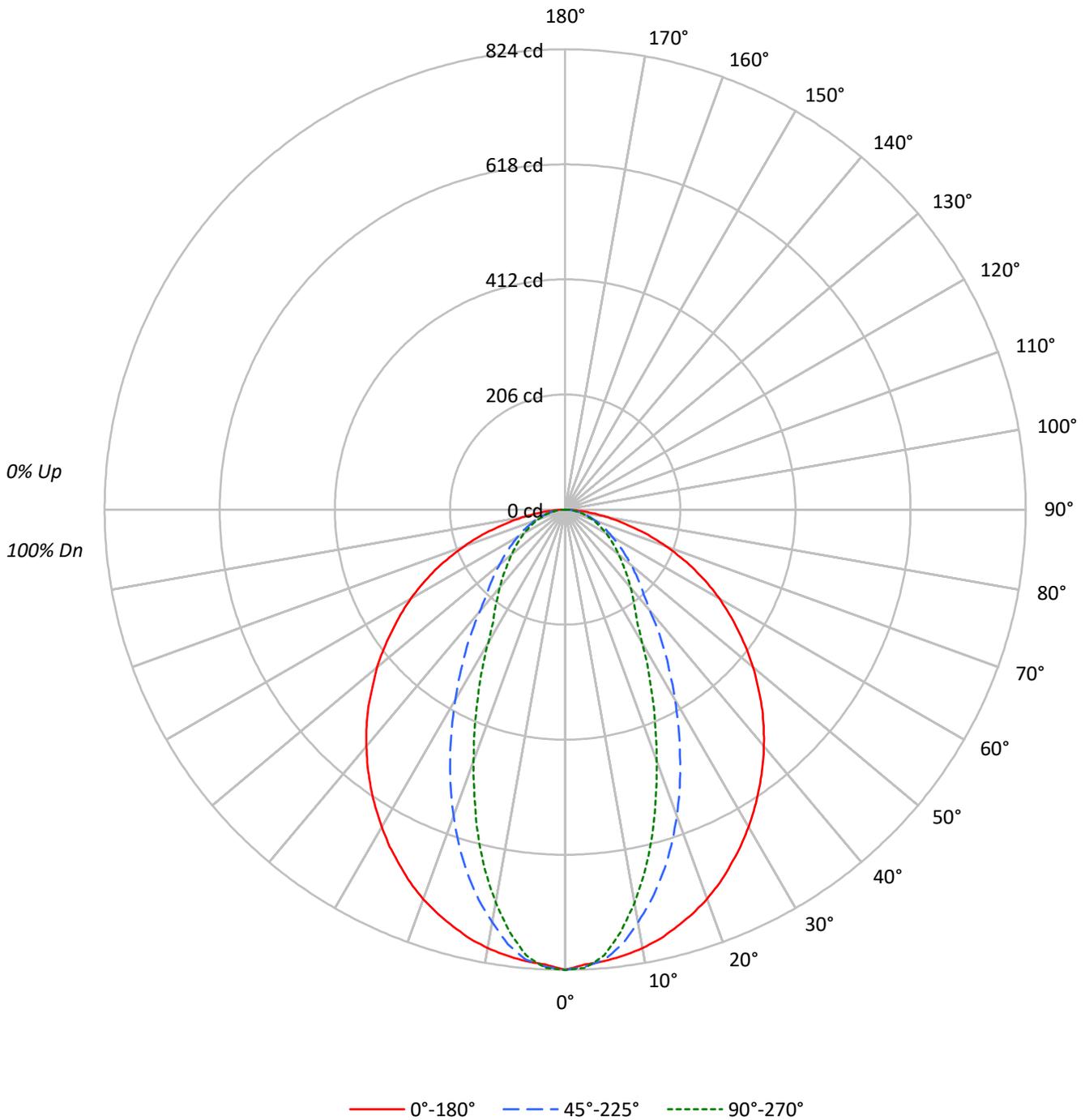
Lumens per Lamp: N/A
Luminaire Lumens: 1246.3 lumens
Efficiency: N/A
Efficacy: 65.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15611	15611	15611
5°	15435	15382	15237
10°	15335	14432	13744
15°	15162	13230	11823
20°	14960	11764	9653
25°	14660	10168	7705
30°	14349	8591	6014
35°	14023	7186	5051
40°	13682	5827	4499
45°	13327	5093	4024
50°	12933	4507	3675
55°	12492	4073	3412
60°	12061	3706	3183
65°	11490	3398	2995
70°	10647	3169	2825
75°	9428	2877	2672
80°	8041	2706	2477
85°	5543	2391	2239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13327 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	6.1
10°-20°	190.6	15.3
20°-30°	234.9	18.8
30°-40°	225.4	18.1
40°-50°	194.4	15.6
50°-60°	150.8	12.1
60°-70°	103.3	8.3
70°-80°	56.1	4.5
80°-90°	15.4	1.2
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°	501.0	40.2
0°-40°	726.4	58.3
0°-60°	1071.6	86.0
0°-90°	1246.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1246.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	812	823	809	798	801	77
15°	773	750	674	619	603	218
25°	701	626	486	397	369	323
35°	606	481	311	232	218	379
45°	497	335	190	157	150	383
55°	378	201	123	107	103	339
65°	256	110	76	69	67	253
75°	129	50	39	37	36	138
85°	26	12	11	11	10	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.0	824.0	824.0	824.0	824.0
2.5°	815.0	828.8	819.1	819.1	821.2
5°	811.6	823.3	808.8	798.5	801.2
7.5°	805.4	813.6	784.7	762.6	762.0
10°	797.1	797.8	750.2	721.3	714.4
12.5°	786.8	775.7	715.1	671.7	661.4
15°	773.0	749.5	674.5	619.3	602.8
17.5°	758.5	722.7	631.1	562.2	539.4
20°	742.0	690.3	583.5	505.0	478.8
22.5°	723.4	659.3	536.0	449.9	422.3
25°	701.3	626.2	486.4	396.8	368.6
27.5°	680.0	592.5	438.8	350.0	321.0
30°	655.9	556.0	392.7	305.2	274.9
32.5°	631.7	518.8	350.0	262.5	239.7
35°	606.3	480.9	310.7	231.5	218.4
37.5°	580.1	443.7	273.5	210.8	199.1
40°	553.2	406.5	235.6	190.8	181.9
42.5°	525.6	370.0	209.4	174.3	166.0
45°	497.4	334.8	190.1	157.1	150.2
47.5°	467.1	299.7	171.5	142.6	136.4
50°	438.8	265.9	152.9	129.5	124.7
52.5°	408.5	232.9	137.8	117.8	113.7
55°	378.2	201.2	123.3	106.8	103.3
57.5°	348.6	170.9	109.5	96.4	93.7
60°	318.3	146.7	97.8	86.8	84.0
62.5°	287.3	127.5	86.8	77.8	75.1
65°	256.3	109.5	75.8	68.9	66.8
67.5°	223.9	92.3	66.1	60.6	59.2
70°	192.2	77.2	57.2	52.4	51.0
72.5°	161.2	62.7	48.2	44.8	43.4
75°	128.8	50.3	39.3	37.2	36.5
77.5°	100.6	39.3	31.7	30.3	29.6
80°	73.7	28.9	24.8	23.4	22.7
82.5°	48.9	20.0	17.9	17.2	16.5
85°	25.5	12.4	11.0	11.0	10.3
87.5°	8.3	5.5	5.5	5.5	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)