

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: P1055211

Luminaire Tested: S122R3DR-S485D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055211
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-S485D927-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

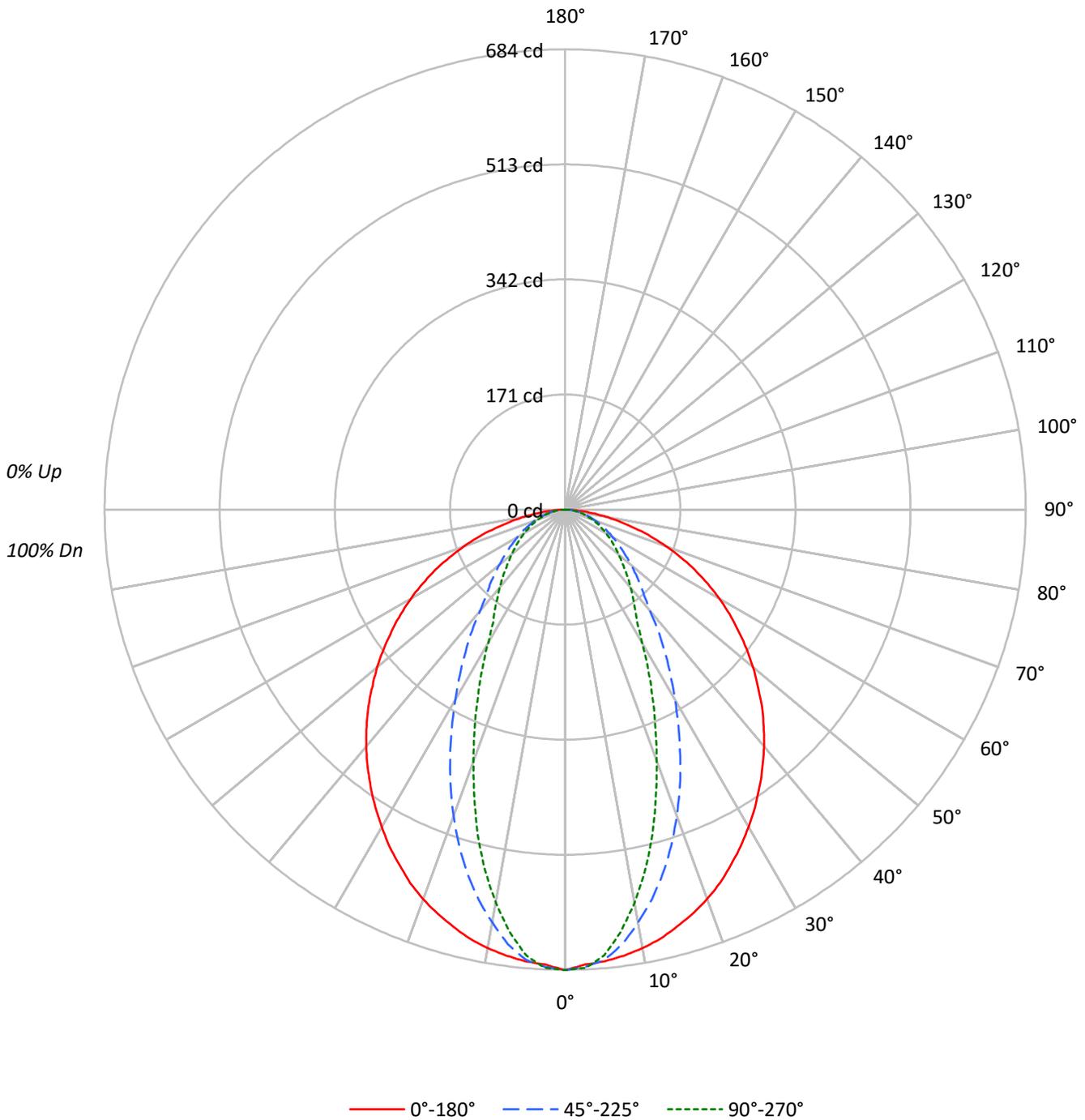
Lumens per Lamp: N/A
Luminaire Lumens: 1034.9 lumens
Efficiency: N/A
Efficacy: 54.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	12963	12963	12963
5°	12816	12773	12653
10°	12734	11985	11412
15°	12590	10986	9819
20°	12422	9768	8016
25°	12175	8443	6399
30°	11914	7134	4994
35°	11643	5967	4193
40°	11362	4838	3735
45°	11066	4231	3341
50°	10741	3743	3051
55°	10375	3382	2834
60°	10015	3077	2645
65°	9540	2820	2488
70°	8841	2631	2343
75°	7833	2386	2218
80°	6677	2248	2062
85°	4608	2000	1869

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11066 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.7	6.1
10°-20°	158.3	15.3
20°-30°	195.1	18.8
30°-40°	187.1	18.1
40°-50°	161.4	15.6
50°-60°	125.2	12.1
60°-70°	85.7	8.3
70°-80°	46.6	4.5
80°-90°	12.8	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°	416.0	40.2
0°-40°	603.2	58.3
0°-60°	889.8	86.0
0°-90°	1034.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1034.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	674	684	672	663	665	64
15°	642	622	560	514	501	181
25°	582	520	404	330	306	268
35°	503	399	258	192	181	315
45°	413	278	158	130	125	318
55°	314	167	102	89	86	281
65°	213	91	63	57	56	210
75°	107	42	33	31	30	115
85°	21	10	9	9	9	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.2	684.2	684.2	684.2	684.2
2.5°	676.8	688.2	680.2	680.2	681.9
5°	673.9	683.6	671.6	663.0	665.3
7.5°	668.7	675.6	651.6	633.3	632.7
10°	661.9	662.5	623.0	599.0	593.2
12.5°	653.3	644.1	593.8	557.8	549.2
15°	641.9	622.4	560.1	514.3	500.6
17.5°	629.8	600.1	524.0	466.8	447.9
20°	616.1	573.2	484.5	419.3	397.6
22.5°	600.7	547.5	445.1	373.6	350.7
25°	582.4	520.0	403.9	329.5	306.1
27.5°	564.6	492.0	364.4	290.6	266.6
30°	544.6	461.7	326.1	253.4	228.3
32.5°	524.6	430.8	290.6	218.0	199.1
35°	503.4	399.3	258.0	192.2	181.3
37.5°	481.7	368.4	227.1	175.1	165.3
40°	459.4	337.5	195.6	158.5	151.0
42.5°	436.5	307.2	173.9	144.7	137.9
45°	413.0	278.0	157.9	130.4	124.7
47.5°	387.9	248.8	142.4	118.4	113.3
50°	364.4	220.8	127.0	107.5	103.5
52.5°	339.2	193.4	114.4	97.8	94.4
55°	314.1	167.0	102.4	88.7	85.8
57.5°	289.5	141.9	91.0	80.1	77.8
60°	264.3	121.9	81.2	72.1	69.8
62.5°	238.6	105.8	72.1	64.6	62.4
65°	212.8	91.0	62.9	57.2	55.5
67.5°	185.9	76.7	54.9	50.3	49.2
70°	159.6	64.1	47.5	43.5	42.3
72.5°	133.9	52.1	40.0	37.2	36.0
75°	107.0	41.8	32.6	30.9	30.3
77.5°	83.5	32.6	26.3	25.2	24.6
80°	61.2	24.0	20.6	19.5	18.9
82.5°	40.6	16.6	14.9	14.3	13.7
85°	21.2	10.3	9.2	9.2	8.6
87.5°	6.9	4.6	4.6	4.6	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)