

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: P1055267

Luminaire Tested: S122R3DR-S865D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055267
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S865D930-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

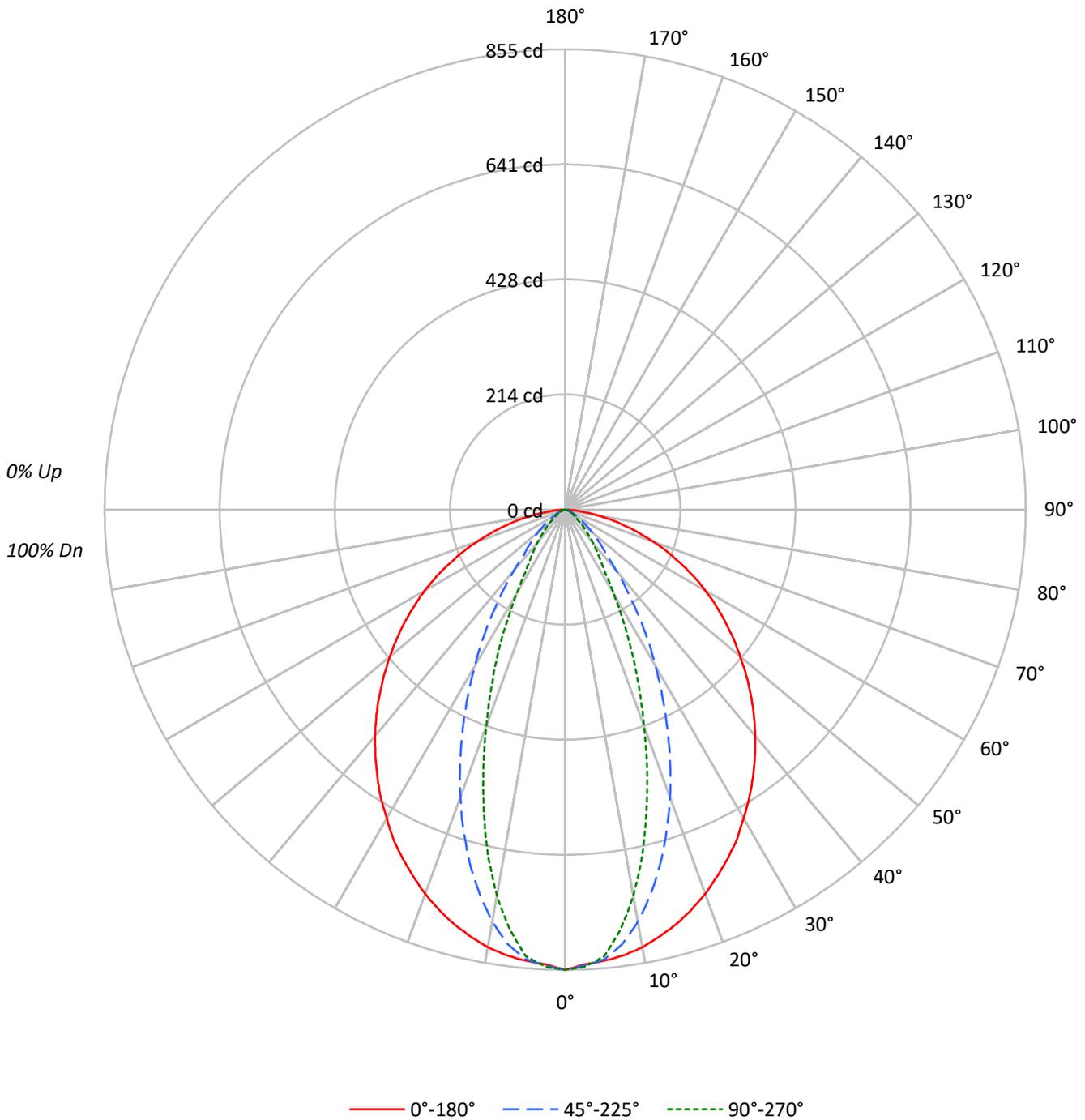
Lumens per Lamp: N/A
Luminaire Lumens: 979.7 lumens
Efficiency: N/A
Efficacy: 28.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71				
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64				
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45				
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16197	16197	16197
5°	16000	15941	15840
10°	15883	14956	14009
15°	15638	13379	11425
20°	15315	11470	8619
25°	14936	9397	6154
30°	14487	7335	3920
35°	14055	5380	2618
40°	13578	3628	1969
45°	13054	2553	1404
50°	12506	1945	987
55°	11974	1351	727
60°	11394	913	595
65°	10566	659	471
70°	9633	521	404
75°	8360	461	307
80°	6634	338	338
85°	3652	456	217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13054 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	8.0
10°-20°	191.9	19.6
20°-30°	219.2	22.4
30°-40°	185.8	19.0
40°-50°	138.7	14.2
50°-60°	89.6	9.1
60°-70°	50.0	5.1
70°-80°	21.9	2.2
80°-90°	4.5	0.5
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°	489.2	49.9
0°-40°	675.0	68.9
0°-60°	903.3	92.2
0°-90°	979.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	979.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	841	852	838	830	833	80
15°	797	777	682	610	582	225
25°	714	631	450	329	294	329
35°	608	458	233	127	113	380
45°	487	289	95	62	52	376
55°	362	137	41	25	22	324
65°	236	50	15	12	10	234
75°	114	10	6	5	4	122
85°	17	1	2	1	1	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	854.9	854.9	854.9	854.9	854.9
2.5°	845.5	858.1	847.6	847.6	849.7
5°	841.3	851.8	838.2	829.8	832.9
7.5°	835.0	842.4	814.1	788.9	786.8
10°	825.6	828.7	777.4	738.6	728.2
12.5°	812.0	804.6	732.3	677.9	660.1
15°	797.3	777.4	682.1	609.8	582.5
17.5°	779.5	743.9	626.5	538.5	505.0
20°	759.6	709.3	568.9	464.1	427.5
22.5°	737.6	670.5	509.2	393.9	357.3
25°	714.5	630.7	449.5	329.0	294.4
27.5°	690.4	588.8	390.8	270.3	232.6
30°	662.2	545.9	335.3	213.7	179.2
32.5°	636.0	500.8	283.9	165.5	136.2
35°	607.7	457.8	232.6	126.8	113.2
37.5°	578.3	414.9	187.5	106.9	95.3
40°	549.0	371.9	146.7	90.1	79.6
42.5°	518.6	330.0	113.2	75.4	65.0
45°	487.2	289.2	95.3	61.8	52.4
47.5°	455.8	248.3	79.6	49.2	41.9
50°	424.3	209.5	66.0	38.8	33.5
52.5°	393.9	172.9	52.4	31.4	27.2
55°	362.5	137.3	40.9	25.1	22.0
57.5°	331.1	106.9	31.4	21.0	18.9
60°	300.7	80.7	24.1	16.8	15.7
62.5°	269.3	65.0	18.9	13.6	12.6
65°	235.7	50.3	14.7	11.5	10.5
67.5°	205.4	36.7	11.5	9.4	8.4
70°	173.9	25.1	9.4	8.4	7.3
72.5°	143.5	15.7	7.3	6.3	6.3
75°	114.2	10.5	6.3	5.2	4.2
77.5°	87.0	6.3	4.2	4.2	3.1
80°	60.8	4.2	3.1	3.1	3.1
82.5°	37.7	3.1	2.1	2.1	2.1
85°	16.8	1.0	2.1	1.0	1.0
87.5°	3.1	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)