

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: P1055275

Luminaire Tested: S122R3DR-S865D950-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S865D950-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

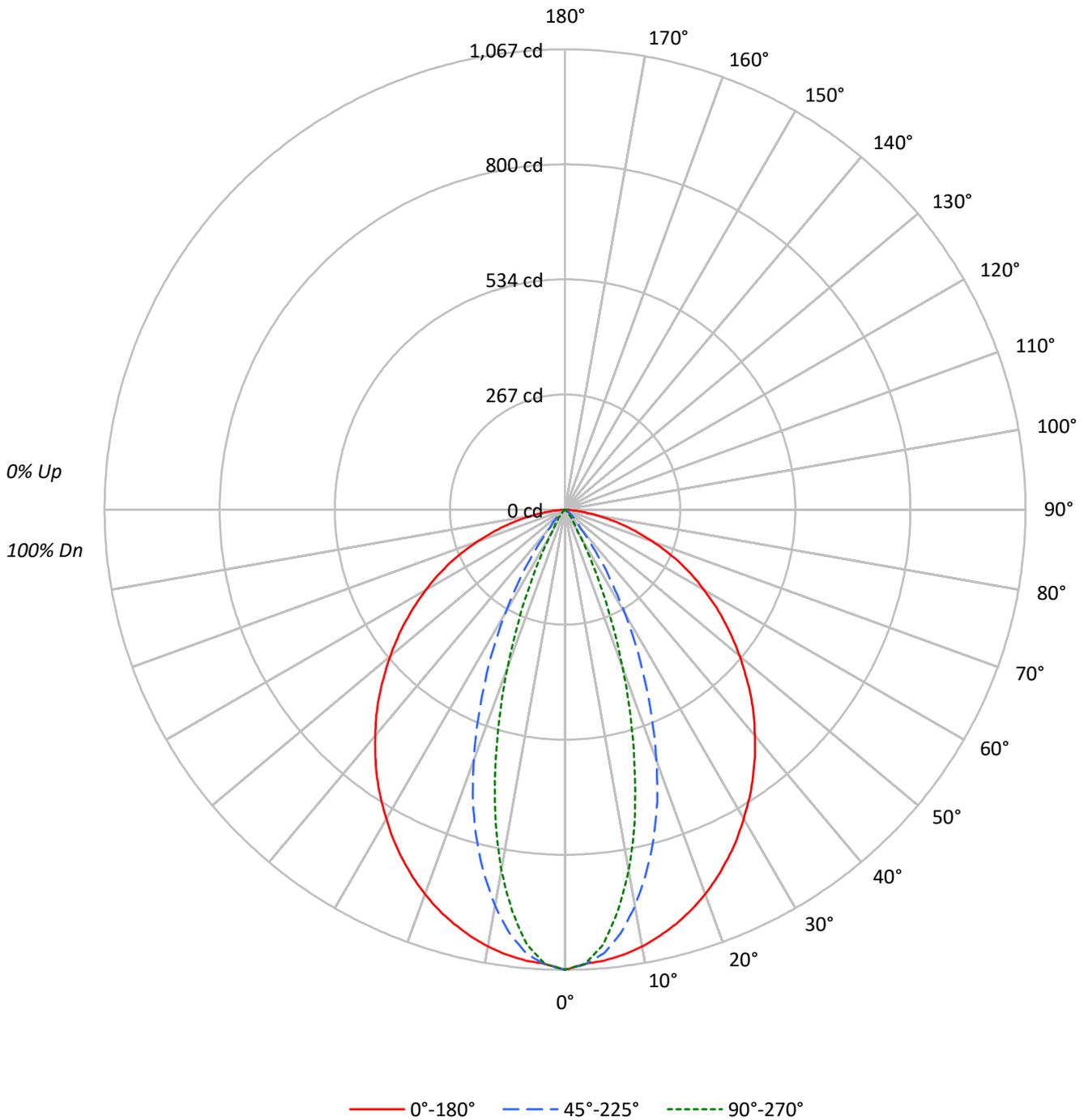
Lumens per Lamp: N/A
Luminaire Lumens: 970.3 lumens
Efficiency: N/A
Efficacy: 28.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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				100
1	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81				81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61				61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56				56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52				52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49				49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45				45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43				43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20208	20208	20208
5°	19958	19633	19258
10°	19788	17949	16345
15°	19502	15534	12239
20°	19131	12482	7835
25°	18657	9150	4024
30°	18103	5981	1315
35°	17552	3317	766
40°	16919	1333	425
45°	16293	887	163
50°	15574	507	74
55°	14861	244	40
60°	14077	95	0
65°	13247	54	0
70°	11882	66	0
75°	10234	88	0
80°	7757	0	0
85°	3195	261	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16293 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	9.9
10°-20°	222.2	22.9
20°-30°	225.6	23.2
30°-40°	169.3	17.4
40°-50°	118.5	12.2
50°-60°	72.5	7.5
60°-70°	43.2	4.5
70°-80°	19.9	2.1
80°-90°	3.6	0.4
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°	543.3	56.0
0°-40°	712.6	73.4
0°-60°	903.7	93.1
0°-90°	970.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	970.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1049	1059	1032	1013	1013	100
15°	994	940	792	671	624	280
25°	892	736	438	250	192	411
35°	759	494	143	43	33	474
45°	608	261	33	10	6	469
55°	450	80	7	2	1	402
65°	296	23	1	1	0	291
75°	140	2	1	1	0	148
85°	15	0	1	1	0	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1066.6	1066.6	1066.6	1066.6	1066.6
2.5°	1054.3	1070.3	1055.6	1053.1	1054.3
5°	1049.4	1059.2	1032.3	1012.6	1012.6
7.5°	1040.8	1040.8	990.6	950.1	937.9
10°	1028.6	1015.1	933.0	868.0	849.6
12.5°	1012.6	980.8	865.5	773.6	744.2
15°	994.3	940.3	792.0	670.6	624.0
17.5°	973.4	895.0	709.8	559.0	505.1
20°	948.9	845.9	619.1	445.0	388.6
22.5°	921.9	792.0	527.2	343.3	283.2
25°	892.5	735.6	437.7	250.1	192.5
27.5°	861.8	676.7	355.5	171.6	117.7
30°	827.5	615.4	273.4	101.8	60.1
32.5°	794.4	556.6	204.7	55.2	44.1
35°	758.9	494.1	143.4	42.9	33.1
37.5°	722.1	435.2	88.3	31.9	24.5
40°	684.1	375.1	53.9	23.3	17.2
42.5°	647.3	318.7	42.9	15.9	11.0
45°	608.1	261.1	33.1	9.8	6.1
47.5°	567.6	208.4	24.5	6.1	3.7
50°	528.4	161.8	17.2	3.7	2.5
52.5°	489.2	118.9	11.0	2.5	1.2
55°	449.9	79.7	7.4	2.5	1.2
57.5°	410.7	56.4	4.9	1.2	1.2
60°	371.5	44.1	2.5	1.2	0.0
62.5°	334.7	34.3	2.5	1.2	1.2
65°	295.5	23.3	1.2	1.2	0.0
67.5°	253.8	14.7	1.2	1.2	0.0
70°	214.5	8.6	1.2	1.2	0.0
72.5°	176.5	4.9	1.2	1.2	0.0
75°	139.8	2.5	1.2	1.2	0.0
77.5°	104.2	1.2	0.0	1.2	0.0
80°	71.1	0.0	0.0	1.2	0.0
82.5°	41.7	0.0	0.0	1.2	0.0
85°	14.7	0.0	1.2	1.2	0.0
87.5°	0.0	0.0	1.2	1.2	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)