

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: P1055265

Luminaire Tested: S122R3DR-S865D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055265
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-S865D927-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

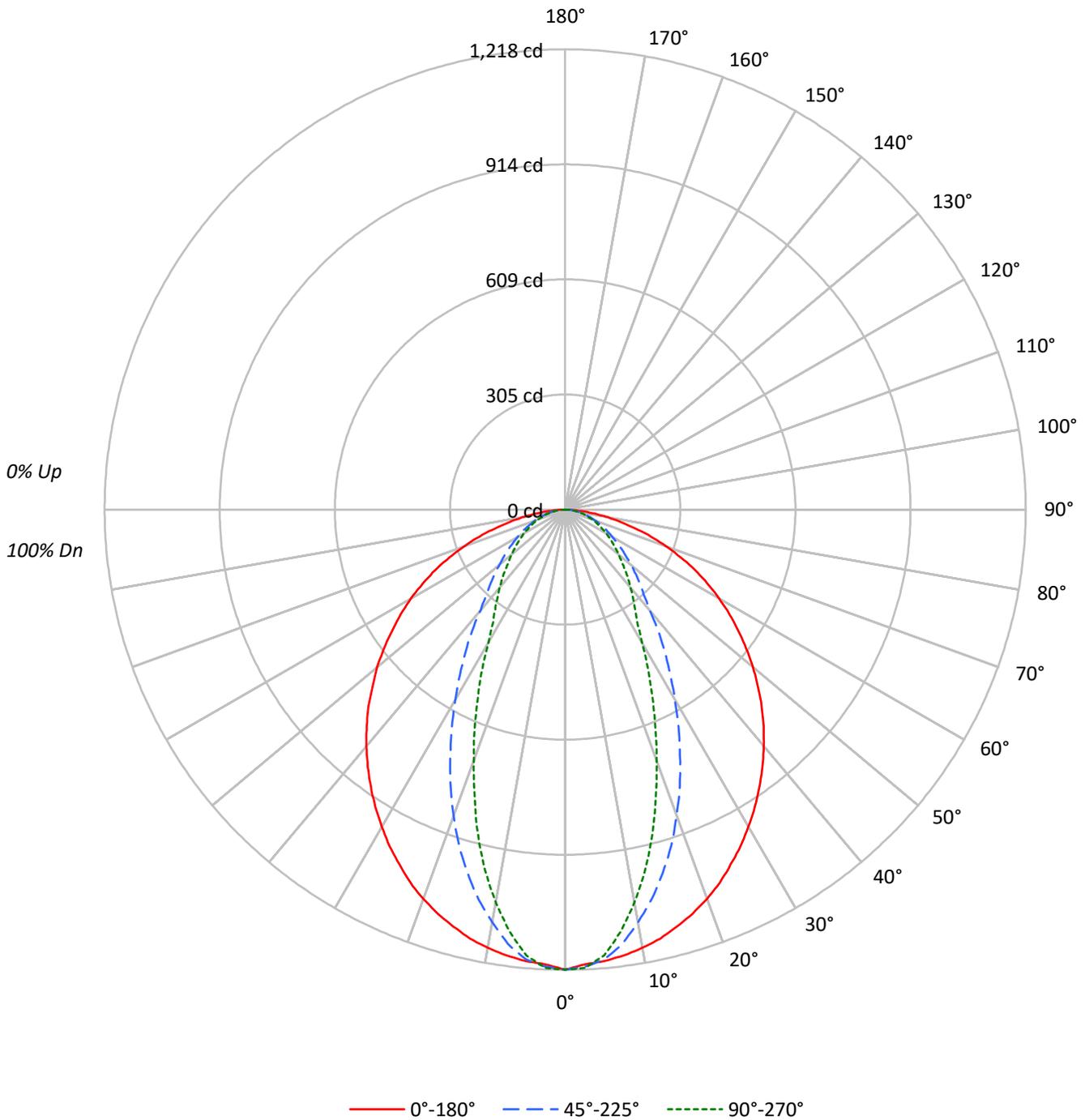
Lumens per Lamp: N/A
Luminaire Lumens: 1841.6 lumens
Efficiency: N/A
Efficacy: 53.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1055265

CATALOG NUMBER: S122R3DR-S865D927-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055265

CATALOG NUMBER: S122R3DR-S865D927-X4F0-XX-UDD-FLL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23067	23067	23067
5°	22807	22729	22516
10°	22659	21327	20310
15°	22403	19548	17472
20°	22105	17383	14264
25°	21663	15024	11385
30°	21201	12695	8886
35°	20719	10618	7464
40°	20218	8612	6648
45°	19693	7529	5945
50°	19114	6661	5432
55°	18461	6018	5044
60°	17820	5479	4706
65°	16977	5021	4425
70°	15732	4681	4171
75°	13937	4246	3953
80°	11882	3993	3666
85°	8195	3543	3326

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19693 cd/sqm



TEST NUMBER: P1055265

CATALOG NUMBER: S122R3DR-S865D927-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.6	6.1
10°-20°	281.7	15.3
20°-30°	347.1	18.8
30°-40°	333.0	18.1
40°-50°	287.3	15.6
50°-60°	222.8	12.1
60°-70°	152.6	8.3
70°-80°	82.8	4.5
80°-90°	22.7	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°	740.4	40.2
0°-40°	1073.4	58.3
0°-60°	1583.5	86.0
0°-90°	1841.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1841.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1199	1216	1195	1180	1184	114
15°	1142	1108	997	915	891	322
25°	1036	925	719	586	545	478
35°	896	711	459	342	323	560
45°	735	495	281	232	222	566
55°	559	297	182	158	153	500
65°	379	162	112	102	99	374
75°	190	74	58	55	54	204
85°	38	18	16	16	15	48
90°	0	0	0	0	0	



TEST NUMBER: P1055265

CATALOG NUMBER: S122R3DR-S865D927-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.5	1217.5	1217.5	1217.5	1217.5
2.5°	1204.3	1224.7	1210.4	1210.4	1213.5
5°	1199.2	1216.5	1195.1	1179.9	1183.9
7.5°	1190.0	1202.3	1159.5	1126.9	1125.9
10°	1177.8	1178.8	1108.6	1065.9	1055.7
12.5°	1162.6	1146.3	1056.7	992.6	977.3
15°	1142.2	1107.6	996.6	915.2	890.8
17.5°	1120.8	1067.9	932.5	830.7	797.1
20°	1096.4	1020.0	862.2	746.2	707.5
22.5°	1068.9	974.2	792.0	664.8	624.0
25°	1036.3	925.4	718.7	586.4	544.6
27.5°	1004.8	875.5	648.5	517.1	474.4
30°	969.1	821.5	580.3	451.0	406.2
32.5°	933.5	766.6	517.1	387.9	354.3
35°	895.8	710.6	459.1	342.0	322.7
37.5°	857.2	655.6	404.1	311.5	294.2
40°	817.5	600.6	348.2	282.0	268.8
42.5°	776.7	546.7	309.5	257.6	245.3
45°	735.0	494.8	281.0	232.1	221.9
47.5°	690.2	442.8	253.5	210.7	201.6
50°	648.5	392.9	226.0	191.4	184.3
52.5°	603.7	344.1	203.6	174.1	168.0
55°	558.9	297.3	182.2	157.8	152.7
57.5°	515.1	252.5	161.9	142.5	138.4
60°	470.3	216.8	144.6	128.3	124.2
62.5°	424.5	188.3	128.3	115.0	111.0
65°	378.7	161.9	112.0	101.8	98.7
67.5°	330.9	136.4	97.7	89.6	87.5
70°	284.0	114.0	84.5	77.4	75.3
72.5°	238.2	92.6	71.3	66.2	64.1
75°	190.4	74.3	58.0	55.0	54.0
77.5°	148.6	58.0	46.8	44.8	43.8
80°	108.9	42.8	36.6	34.6	33.6
82.5°	72.3	29.5	26.5	25.5	24.4
85°	37.7	18.3	16.3	16.3	15.3
87.5°	12.2	8.1	8.1	8.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)