

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: P1055251

Luminaire Tested: S122R3DR-S865D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055251
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-S865D830-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

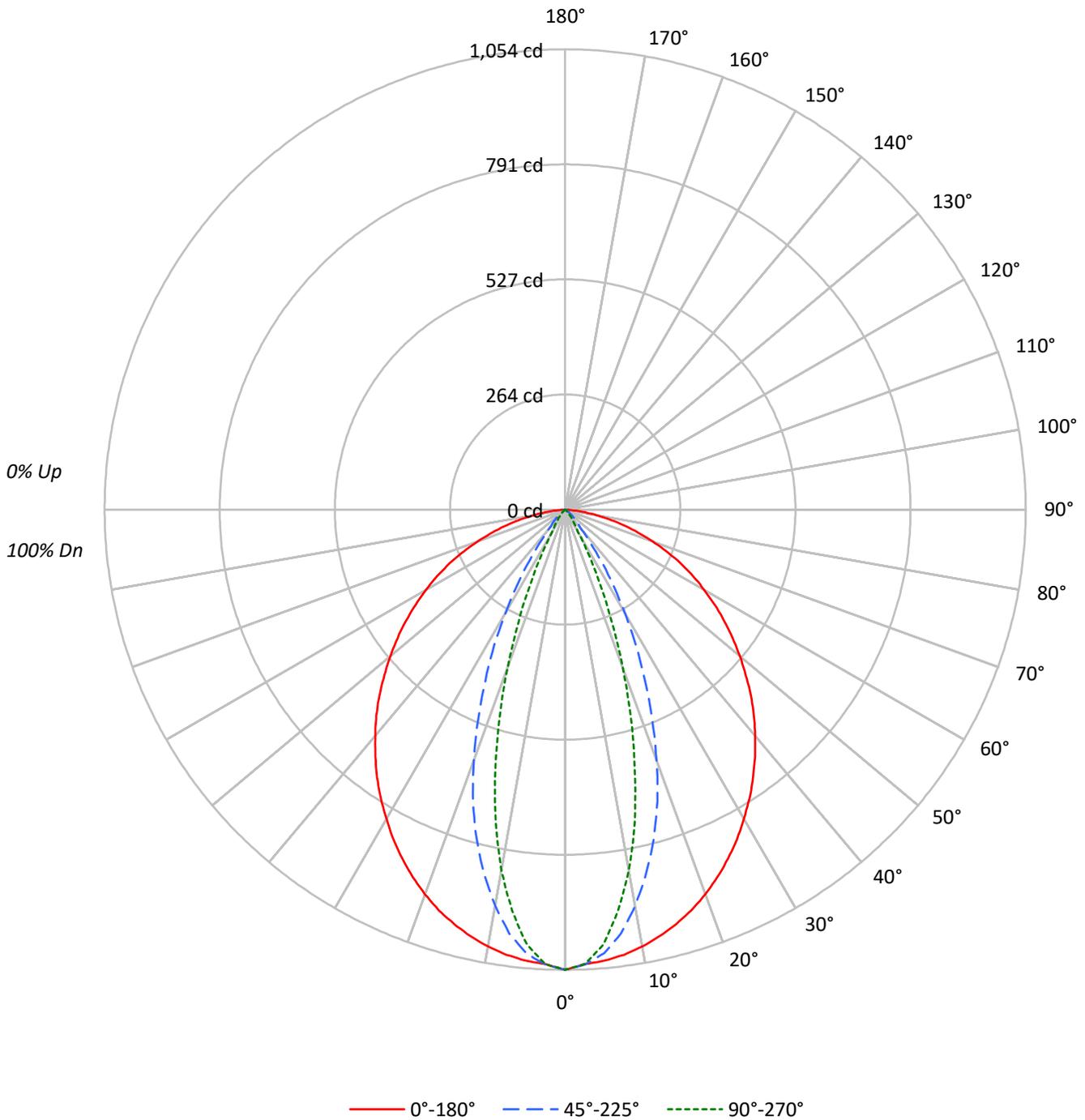
Lumens per Lamp: N/A
Luminaire Lumens: 958.7 lumens
Efficiency: N/A
Efficacy: 27.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	19965	19965	19965
5°	19718	19397	19028
10°	19550	17732	16148
15°	19267	15348	12092
20°	18902	12333	7742
25°	18434	9039	3976
30°	17886	5909	1299
35°	17342	3277	756
40°	16716	1318	420
45°	16098	876	163
50°	15386	501	71
55°	14682	241	40
60°	13906	91	0
65°	13086	54	0
70°	11744	66	0
75°	10109	88	0
80°	7670	0	0
85°	3152	261	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16098 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	9.9
10°-20°	219.5	22.9
20°-30°	222.9	23.2
30°-40°	167.2	17.4
40°-50°	117.1	12.2
50°-60°	71.7	7.5
60°-70°	42.7	4.5
70°-80°	19.7	2.1
80°-90°	3.5	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°	536.8	56.0
0°-40°	704.0	73.4
0°-60°	892.8	93.1
0°-90°	958.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	958.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1037	1046	1020	1000	1000	98
15°	982	929	782	662	616	277
25°	882	727	432	247	190	406
35°	750	488	142	42	33	469
45°	601	258	33	10	6	463
55°	444	79	7	2	1	397
65°	292	23	1	1	0	288
75°	138	2	1	1	0	147
85°	14	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°	1053.8	1053.8	1053.8	1053.8	1053.8
2.5°	1041.7	1057.4	1042.9	1040.5	1041.7
5°	1036.8	1046.5	1019.9	1000.5	1000.5
7.5°	1028.3	1028.3	978.7	938.7	926.6
10°	1016.2	1002.9	921.7	857.6	839.4
12.5°	1000.5	969.0	855.1	764.3	735.2
15°	982.3	929.0	782.5	662.5	616.5
17.5°	961.7	884.2	701.3	552.3	499.0
20°	937.5	835.8	611.7	439.7	384.0
22.5°	910.8	782.5	520.8	339.1	279.8
25°	881.8	726.7	432.4	247.1	190.2
27.5°	851.5	668.6	351.3	169.6	116.3
30°	817.6	608.0	270.1	100.5	59.4
32.5°	784.9	549.9	202.3	54.5	43.6
35°	749.8	488.1	141.7	42.4	32.7
37.5°	713.4	430.0	87.2	31.5	24.2
40°	675.9	370.6	53.3	23.0	17.0
42.5°	639.5	314.9	42.4	15.7	10.9
45°	600.8	258.0	32.7	9.7	6.1
47.5°	560.8	205.9	24.2	6.1	3.6
50°	522.0	159.9	17.0	3.6	2.4
52.5°	483.3	117.5	10.9	2.4	1.2
55°	444.5	78.7	7.3	2.4	1.2
57.5°	405.8	55.7	4.8	1.2	1.2
60°	367.0	43.6	2.4	1.2	0.0
62.5°	330.7	33.9	2.4	1.2	1.2
65°	291.9	23.0	1.2	1.2	0.0
67.5°	250.7	14.5	1.2	1.2	0.0
70°	212.0	8.5	1.2	1.2	0.0
72.5°	174.4	4.8	1.2	1.2	0.0
75°	138.1	2.4	1.2	1.2	0.0
77.5°	103.0	1.2	0.0	1.2	0.0
80°	70.3	0.0	0.0	1.2	0.0
82.5°	41.2	0.0	0.0	1.2	0.0
85°	14.5	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)