

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: P1055143

Luminaire Tested: S122R3DR-S1005D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055143
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-S1005D830-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

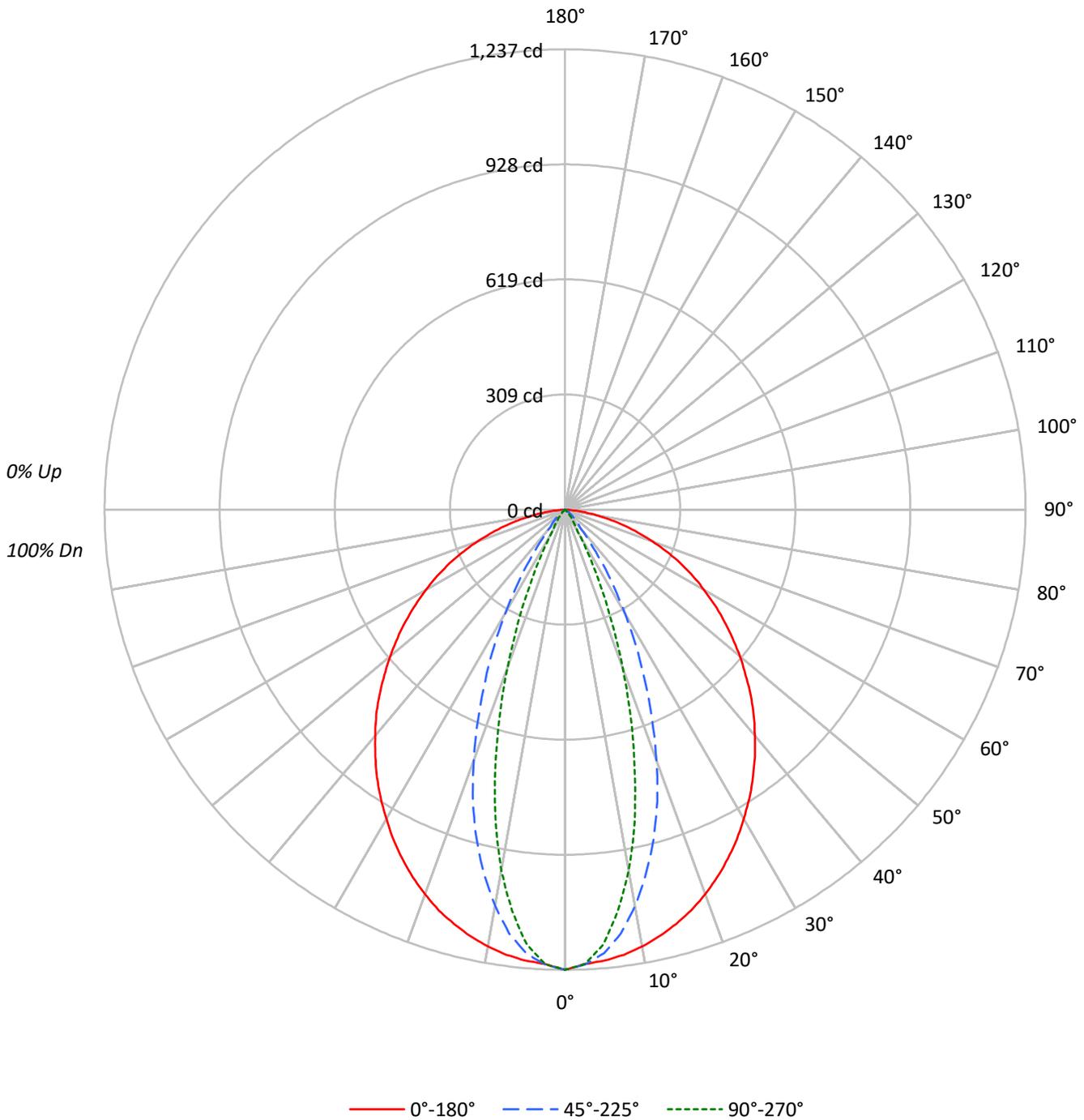
Lumens per Lamp: N/A
Luminaire Lumens: 1125.1 lumens
Efficiency: N/A
Efficacy: 26.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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									
RC	80									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	62	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°	23430	23430	23430
5°	23141	22763	22331
10°	22943	20812	18951
15°	22611	18012	14191
20°	22182	14474	9085
25°	21634	10609	4666
30°	20991	6935	1525
35°	20351	3846	888
40°	19617	1546	492
45°	18892	1029	190
50°	18059	587	83
55°	17232	281	46
60°	16320	106	0
65°	15359	63	0
70°	13782	78	0
75°	11866	102	0
80°	8990	0	0
85°	3717	304	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18892 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.9	9.9
10°-20°	257.6	22.9
20°-30°	261.5	23.2
30°-40°	196.3	17.4
40°-50°	137.4	12.2
50°-60°	84.1	7.5
60°-70°	50.1	4.5
70°-80°	23.1	2.1
80°-90°	4.1	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°	630.0	56.0
0°-40°	826.3	73.4
0°-60°	1047.8	93.1
0°-90°	1125.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1125.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1217	1228	1197	1174	1174	115
15°	1153	1090	918	778	724	325
25°	1035	853	508	290	223	476
35°	880	573	166	50	38	550
45°	705	303	38	11	7	543
55°	522	92	8	3	1	466
65°	343	27	1	1	0	338
75°	162	3	1	1	0	172
85°	17	0	1	1	0	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1236.7	1236.7	1236.7	1236.7	1236.7
2.5°	1222.5	1241.0	1223.9	1221.1	1222.5
5°	1216.8	1228.2	1196.9	1174.2	1174.2
7.5°	1206.9	1206.9	1148.6	1101.7	1087.5
10°	1192.6	1177.0	1081.8	1006.4	985.1
12.5°	1174.2	1137.2	1003.6	897.0	862.9
15°	1152.8	1090.3	918.3	777.6	723.5
17.5°	1128.7	1037.7	823.1	648.2	585.7
20°	1100.2	980.8	717.9	516.0	450.6
22.5°	1069.0	918.3	611.2	398.0	328.4
25°	1034.9	852.9	507.5	290.0	223.2
27.5°	999.3	784.7	412.2	199.0	136.5
30°	959.5	713.6	317.0	118.0	69.7
32.5°	921.1	645.4	237.4	64.0	51.2
35°	879.9	572.9	166.3	49.8	38.4
37.5°	837.3	504.6	102.3	37.0	28.4
40°	793.2	435.0	62.5	27.0	19.9
42.5°	750.6	369.6	49.8	18.5	12.8
45°	705.1	302.8	38.4	11.4	7.1
47.5°	658.2	241.7	28.4	7.1	4.3
50°	612.7	187.6	19.9	4.3	2.8
52.5°	567.2	137.9	12.8	2.8	1.4
55°	521.7	92.4	8.5	2.8	1.4
57.5°	476.2	65.4	5.7	1.4	1.4
60°	430.7	51.2	2.8	1.4	0.0
62.5°	388.1	39.8	2.8	1.4	1.4
65°	342.6	27.0	1.4	1.4	0.0
67.5°	294.3	17.1	1.4	1.4	0.0
70°	248.8	10.0	1.4	1.4	0.0
72.5°	204.7	5.7	1.4	1.4	0.0
75°	162.1	2.8	1.4	1.4	0.0
77.5°	120.8	1.4	0.0	1.4	0.0
80°	82.4	0.0	0.0	1.4	0.0
82.5°	48.3	0.0	0.0	1.4	0.0
85°	17.1	0.0	1.4	1.4	0.0
87.5°	0.0	0.0	1.4	1.4	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)