

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: P1055160

Luminaire Tested: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055160
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-S1005D930-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

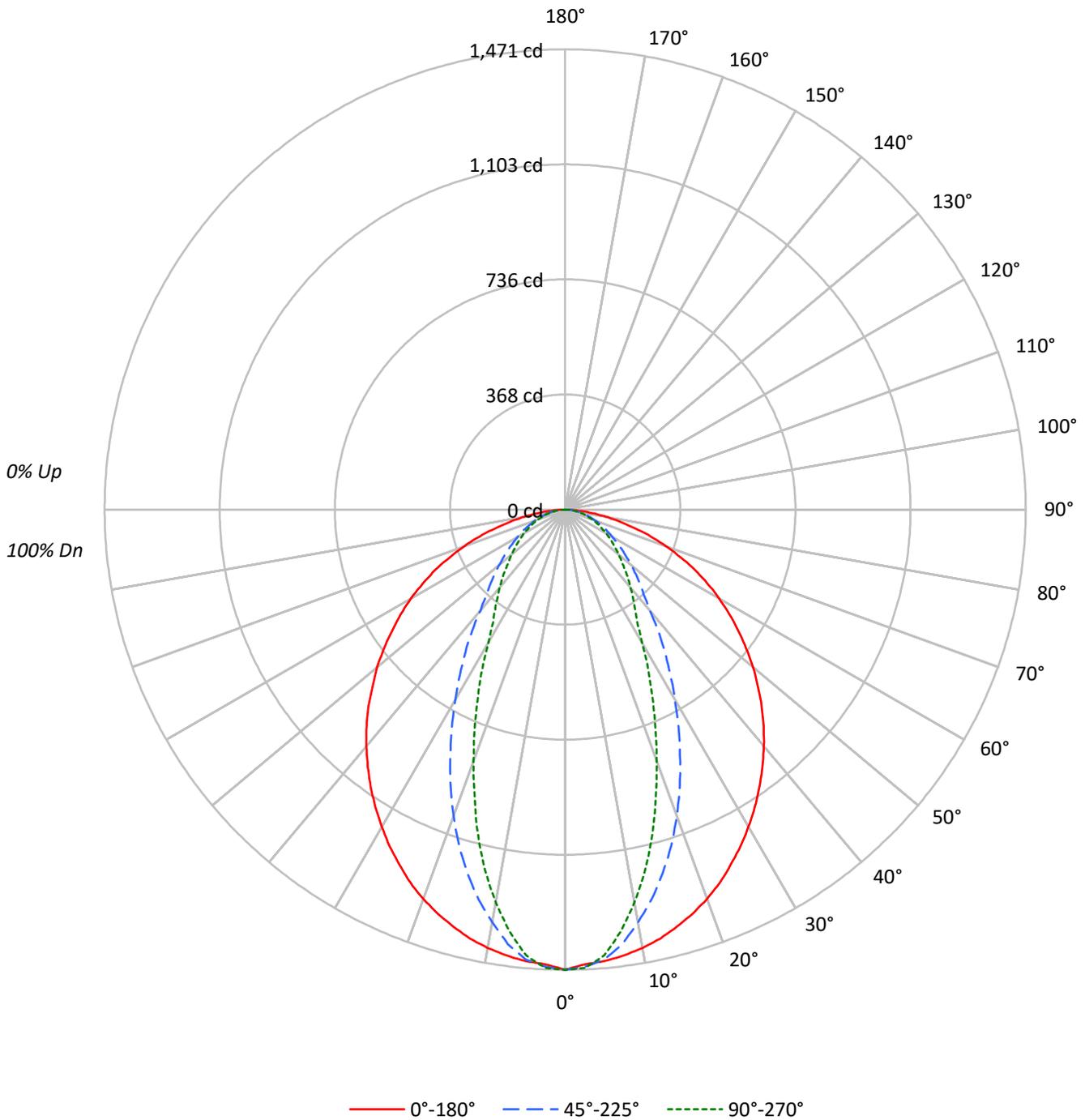
Lumens per Lamp: N/A
Luminaire Lumens: 2224.4 lumens
Efficiency: N/A
Efficacy: 53.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27862	27862	27862
5°	27548	27453	27196
10°	27368	25760	24531
15°	27060	23612	21103
20°	26700	20998	17230
25°	26166	18147	13751
30°	25609	15333	10733
35°	25025	12825	9016
40°	24420	10400	8028
45°	23787	9094	7183
50°	23087	8047	6561
55°	22296	7270	6091
60°	21526	6616	5684
65°	20505	6065	5348
70°	19006	5656	5041
75°	16829	5131	4773
80°	14358	4833	4430
85°	9891	4282	4000

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23787 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	6.1
10°-20°	340.2	15.3
20°-30°	419.2	18.8
30°-40°	402.2	18.1
40°-50°	347.0	15.6
50°-60°	269.2	12.1
60°-70°	184.3	8.3
70°-80°	100.1	4.5
80°-90°	27.4	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°	894.2	40.2
0°-40°	1296.5	58.3
0°-60°	1912.6	86.0
0°-90°	2224.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2224.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1448	1469	1444	1425	1430	137
15°	1380	1338	1204	1105	1076	389
25°	1252	1118	868	708	658	577
35°	1082	858	554	413	390	677
45°	888	598	339	280	268	684
55°	675	359	220	191	184	604
65°	457	196	135	123	119	452
75°	230	90	70	66	65	246
85°	46	22	20	20	18	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1470.6	1470.6	1470.6	1470.6	1470.6
2.5°	1454.6	1479.2	1462.0	1462.0	1465.7
5°	1448.5	1469.4	1443.5	1425.1	1430.0
7.5°	1437.4	1452.2	1400.5	1361.2	1359.9
10°	1422.6	1423.9	1339.0	1287.4	1275.1
12.5°	1404.2	1384.5	1276.3	1198.9	1180.4
15°	1379.6	1337.8	1203.8	1105.4	1075.9
17.5°	1353.8	1289.8	1126.3	1003.3	962.8
20°	1324.3	1232.1	1041.5	901.3	854.6
22.5°	1291.1	1176.7	956.6	802.9	753.7
25°	1251.7	1117.7	868.1	708.2	657.8
27.5°	1213.6	1057.5	783.3	624.6	573.0
30°	1170.6	992.3	700.9	544.7	490.6
32.5°	1127.5	925.9	624.6	468.5	427.9
35°	1082.0	858.3	554.5	413.1	389.8
37.5°	1035.3	791.9	488.1	376.3	355.4
40°	987.4	725.5	420.5	340.6	324.6
42.5°	938.2	660.3	373.8	311.1	296.3
45°	887.8	597.6	339.4	280.3	268.1
47.5°	833.7	534.9	306.2	254.5	243.5
50°	783.3	474.6	273.0	231.2	222.6
52.5°	729.1	415.6	245.9	210.3	202.9
55°	675.0	359.0	220.1	190.6	184.4
57.5°	622.2	304.9	195.5	172.1	167.2
60°	568.1	261.9	174.6	154.9	150.0
62.5°	512.7	227.5	154.9	138.9	134.0
65°	457.4	195.5	135.3	123.0	119.3
67.5°	399.6	164.8	118.0	108.2	105.7
70°	343.1	137.7	102.1	93.4	91.0
72.5°	287.7	111.9	86.1	79.9	77.5
75°	229.9	89.8	70.1	66.4	65.2
77.5°	179.5	70.1	56.6	54.1	52.9
80°	131.6	51.6	44.3	41.8	40.6
82.5°	87.3	35.7	32.0	30.7	29.5
85°	45.5	22.1	19.7	19.7	18.4
87.5°	14.8	9.8	9.8	9.8	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)