

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: P1055986

Luminaire Tested: S124R3DR-S1195D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S1195D840-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

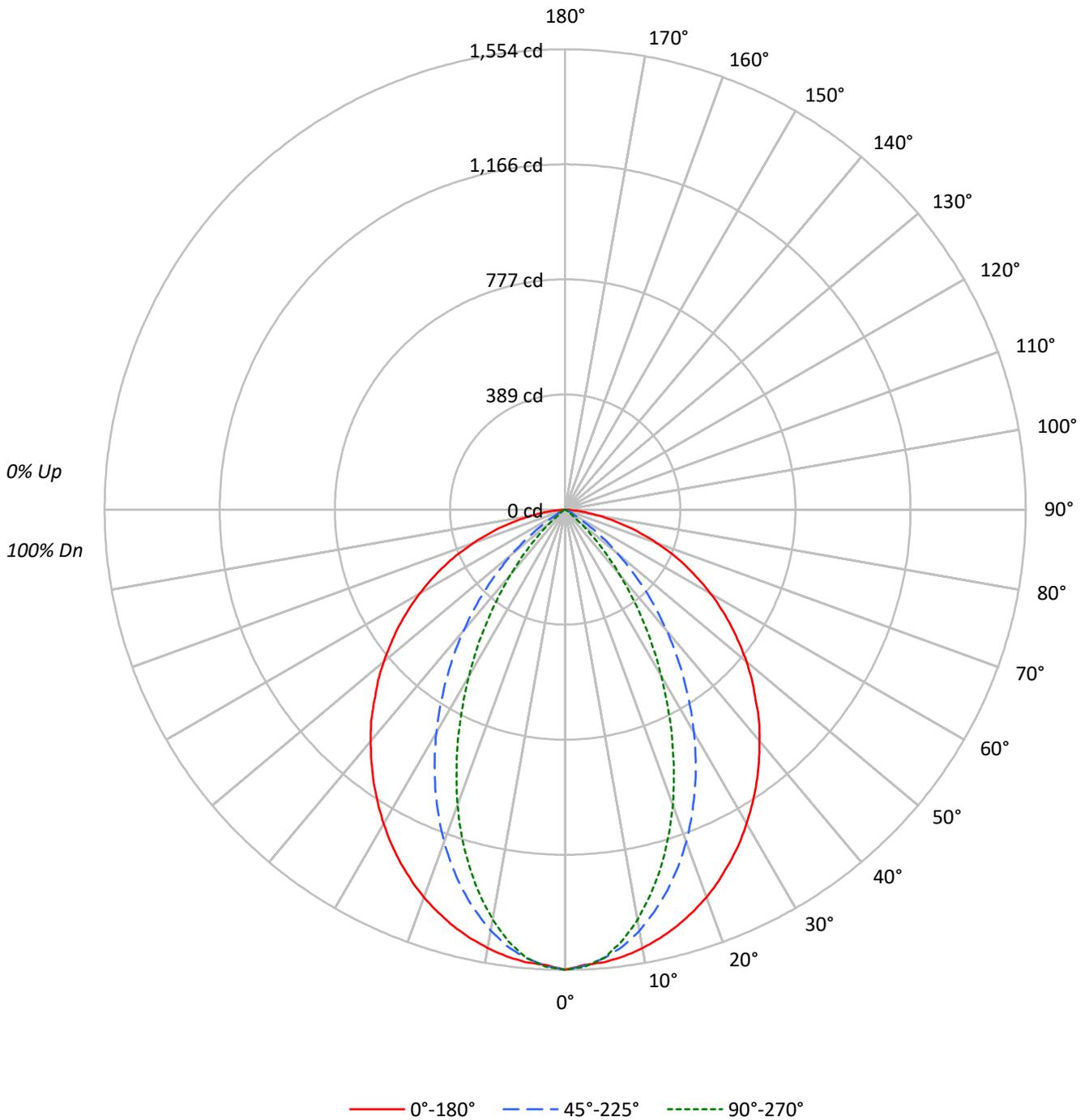
Lumens per Lamp: N/A
Luminaire Lumens: 2171.2 lumens
Efficiency: N/A
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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			100	
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64	
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57			57	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			52	
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47			47	
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43			43	
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40			40	
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13735	13735	13735
5°	13612	13490	13477
10°	13495	12962	12621
15°	13327	12184	11432
20°	13112	11235	9988
25°	12822	10118	8335
30°	12501	8879	6624
35°	12148	7528	4931
40°	11777	6134	3287
45°	11368	4685	1809
50°	10978	3205	503
55°	10540	1737	328
60°	10019	539	189
65°	9368	351	96
70°	8466	158	39
75°	7283	51	0
80°	5504	0	0
85°	2313	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11368 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.3	6.6
10°-20°	376.2	17.3
20°-30°	486.2	22.4
30°-40°	464.7	21.4
40°-50°	347.5	16.0
50°-60°	206.8	9.5
60°-70°	105.0	4.8
70°-80°	36.5	1.7
80°-90°	5.0	0.2
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°	1005.7	46.3
0°-40°	1470.4	67.7
0°-60°	2024.8	93.3
0°-90°	2171.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2171.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1534	1546	1520	1512	1518	145
15°	1456	1426	1331	1269	1249	410
25°	1314	1223	1037	900	854	605
35°	1126	970	698	519	457	704
45°	909	698	375	200	145	703
55°	684	425	113	26	21	610
65°	448	172	17	6	5	443
75°	213	23	2	2	0	226
85°	23	0	0	0	0	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1553.5	1553.5	1553.5	1553.5	1553.5
2.5°	1538.3	1556.5	1541.3	1542.8	1544.4
5°	1533.7	1545.9	1520.0	1512.4	1518.5
7.5°	1521.5	1526.1	1488.0	1468.2	1469.7
10°	1503.2	1498.7	1443.8	1410.3	1405.8
12.5°	1481.9	1466.7	1390.5	1341.8	1331.1
15°	1456.0	1425.6	1331.1	1268.7	1248.9
17.5°	1425.6	1381.4	1265.6	1183.4	1159.0
20°	1393.6	1332.7	1194.1	1092.0	1061.6
22.5°	1355.5	1277.8	1116.4	996.1	958.0
25°	1314.4	1223.0	1037.2	900.1	854.4
27.5°	1271.7	1163.6	953.4	802.6	749.3
30°	1224.5	1101.2	869.7	703.6	648.8
32.5°	1175.8	1037.2	782.8	612.3	551.3
35°	1125.5	970.2	697.5	519.4	456.9
37.5°	1073.7	903.2	615.3	431.0	367.1
40°	1020.4	834.6	531.5	347.3	284.8
42.5°	968.6	766.1	452.3	268.1	210.2
45°	909.2	697.5	374.7	199.5	144.7
47.5°	855.9	630.5	300.0	135.5	85.3
50°	798.1	559.0	233.0	79.2	36.6
52.5°	740.2	491.9	170.6	35.0	27.4
55°	683.8	424.9	112.7	25.9	21.3
57.5°	624.4	357.9	60.9	19.8	15.2
60°	566.6	292.4	30.5	15.2	10.7
62.5°	507.2	230.0	24.4	9.1	6.1
65°	447.8	172.1	16.8	6.1	4.6
67.5°	388.4	117.3	10.7	3.0	1.5
70°	327.5	71.6	6.1	1.5	1.5
72.5°	269.6	36.6	3.0	1.5	1.5
75°	213.2	22.8	1.5	1.5	0.0
77.5°	158.4	12.2	1.5	1.5	0.0
80°	108.1	4.6	0.0	0.0	0.0
82.5°	62.4	1.5	0.0	0.0	0.0
85°	22.8	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)