

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: P1055983

Luminaire Tested: S124R3DR-S1195D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055983
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-S1195D835-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

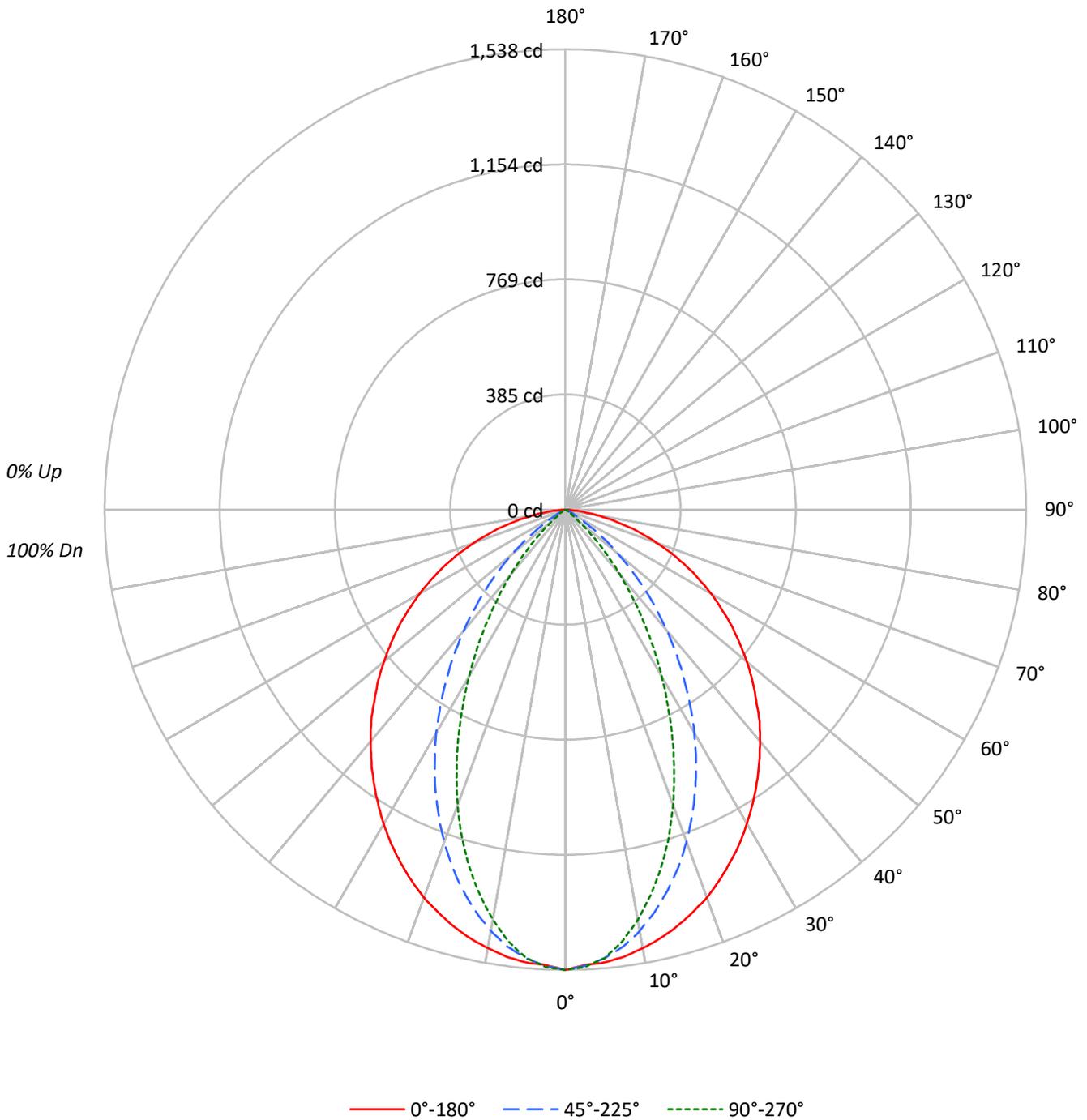
Lumens per Lamp: N/A
Luminaire Lumens: 2150.0 lumens
Efficiency: N/A
Efficacy: 51.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13601	13601	13601
5°	13479	13358	13345
10°	13363	12836	12497
15°	13197	12065	11320
20°	12984	11125	9891
25°	12697	10020	8254
30°	12380	8792	6559
35°	12029	7455	4883
40°	11663	6074	3255
45°	11258	4639	1792
50°	10870	3173	498
55°	10439	1720	325
60°	9920	534	187
65°	9276	347	94
70°	8383	155	39
75°	7211	51	0
80°	5453	0	0
85°	2293	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	6.6
10°-20°	372.6	17.3
20°-30°	481.4	22.4
30°-40°	460.1	21.4
40°-50°	344.1	16.0
50°-60°	204.8	9.5
60°-70°	104.0	4.8
70°-80°	36.1	1.7
80°-90°	4.9	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°	995.9	46.3
0°-40°	1456.1	67.7
0°-60°	2005.0	93.3
0°-90°	2150.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2150.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1538	1538	1538	1538	1538	
5°	1519	1531	1505	1498	1504	144
15°	1442	1412	1318	1256	1237	406
25°	1302	1211	1027	891	846	599
35°	1114	961	691	514	452	697
45°	900	691	371	198	143	696
55°	677	421	112	26	21	605
65°	443	170	17	6	4	438
75°	211	23	2	2	0	224
85°	23	0	0	0	0	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1538.3	1538.3	1538.3	1538.3	1538.3
2.5°	1523.2	1541.3	1526.3	1527.8	1529.3
5°	1518.7	1530.8	1505.1	1497.6	1503.6
7.5°	1506.6	1511.2	1473.5	1453.9	1455.4
10°	1488.5	1484.0	1429.7	1396.5	1392.0
12.5°	1467.4	1452.4	1376.9	1328.7	1318.1
15°	1441.8	1411.6	1318.1	1256.3	1236.7
17.5°	1411.6	1367.9	1253.3	1171.8	1147.7
20°	1380.0	1319.6	1182.4	1081.3	1051.2
22.5°	1342.3	1265.3	1105.5	986.3	948.6
25°	1301.5	1211.0	1027.1	891.3	846.1
27.5°	1259.3	1152.2	944.1	794.8	742.0
30°	1212.6	1090.4	861.2	696.8	642.5
32.5°	1164.3	1027.1	775.2	606.3	546.0
35°	1114.5	960.7	690.7	514.3	452.4
37.5°	1063.2	894.3	609.3	426.8	363.5
40°	1010.5	826.5	526.3	343.9	282.0
42.5°	959.2	758.6	447.9	265.4	208.1
45°	900.4	690.7	371.0	197.6	143.3
47.5°	847.6	624.4	297.1	134.2	84.5
50°	790.3	553.5	230.7	78.4	36.2
52.5°	733.0	487.1	168.9	34.7	27.1
55°	677.2	420.8	111.6	25.6	21.1
57.5°	618.3	354.4	60.3	19.6	15.1
60°	561.0	289.6	30.2	15.1	10.6
62.5°	502.2	227.7	24.1	9.0	6.0
65°	443.4	170.4	16.6	6.0	4.5
67.5°	384.6	116.1	10.6	3.0	1.5
70°	324.3	70.9	6.0	1.5	1.5
72.5°	266.9	36.2	3.0	1.5	1.5
75°	211.1	22.6	1.5	1.5	0.0
77.5°	156.8	12.1	1.5	1.5	0.0
80°	107.1	4.5	0.0	0.0	0.0
82.5°	61.8	1.5	0.0	0.0	0.0
85°	22.6	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)