

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: P1056086

Luminaire Tested: S124R3DR-S795D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S795D950-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

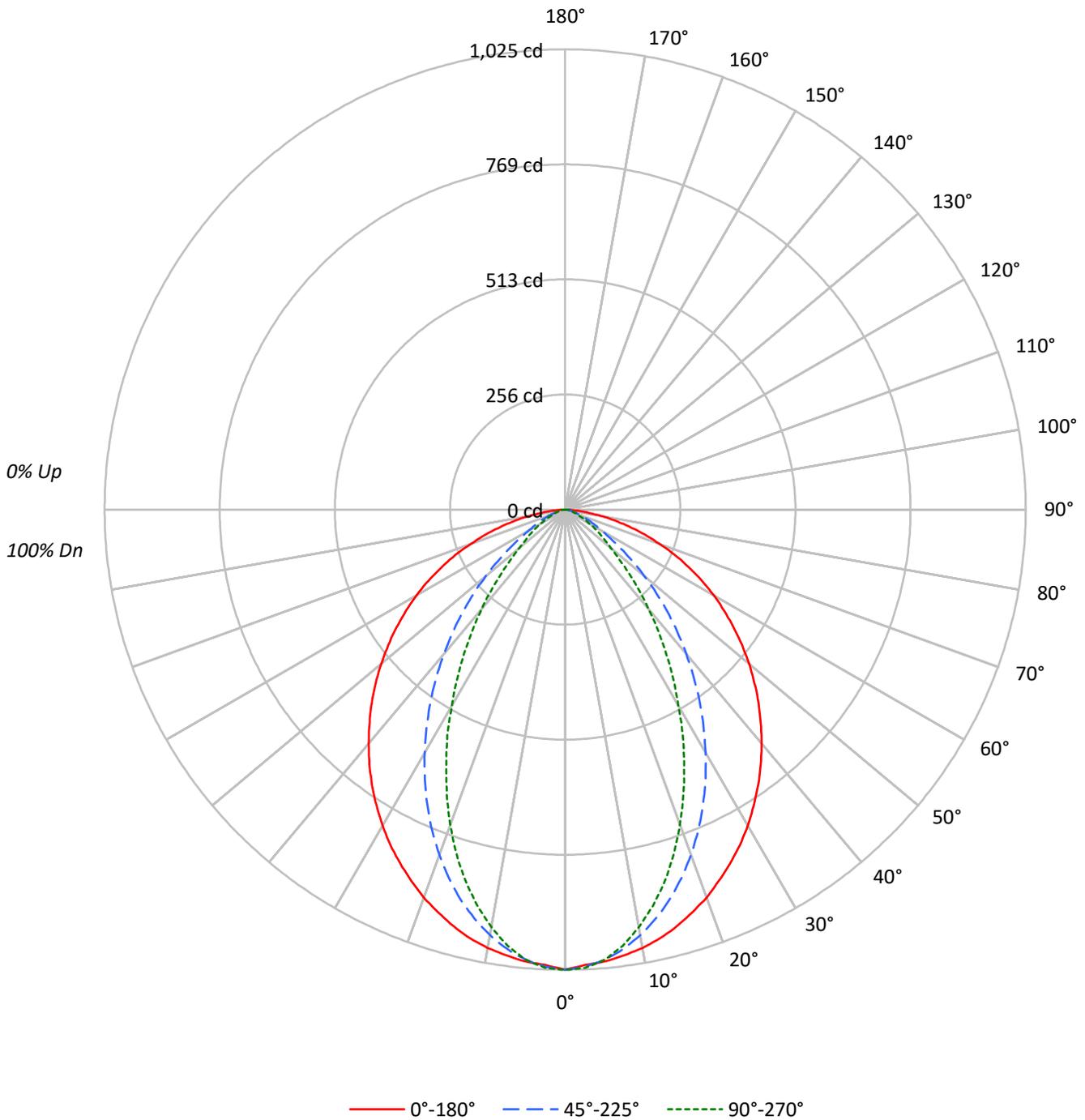
Lumens per Lamp: N/A
Luminaire Lumens: 1656.7 lumens
Efficiency: N/A
Efficacy: 62.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9059	9059	9059
5°	8967	8933	8933
10°	8899	8642	8480
15°	8794	8226	7842
20°	8653	7701	7028
25°	8478	7082	6105
30°	8298	6380	5142
35°	8083	5632	4232
40°	7851	4834	3337
45°	7611	4020	2493
50°	7348	3162	1824
55°	7058	2338	1455
60°	6748	1620	1114
65°	6347	1257	818
70°	5747	887	641
75°	5018	618	488
80°	4033	484	438
85°	2222	385	385

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7611 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	5.7
10°-20°	253.9	15.3
20°-30°	338.7	20.4
30°-40°	341.0	20.6
40°-50°	279.7	16.9
50°-60°	191.2	11.5
60°-70°	106.8	6.4
70°-80°	42.4	2.6
80°-90°	8.0	0.5
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°	687.7	41.5
0°-40°	1028.7	62.1
0°-60°	1499.5	90.5
0°-90°	1656.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1656.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1025	1025	1025	1025	1025	
5°	1010	1022	1006	1002	1006	96
15°	961	950	899	867	857	271
25°	869	826	726	652	626	400
35°	749	670	522	423	392	468
45°	609	497	322	226	199	469
55°	458	322	152	101	94	410
65°	303	153	60	43	39	300
75°	147	40	18	15	14	157
85°	22	4	4	4	4	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1024.6	1024.6	1024.6	1024.6	1024.6
2.5°	1015.1	1027.5	1018.9	1019.8	1021.7
5°	1010.3	1021.7	1006.5	1001.7	1006.5
7.5°	1001.7	1010.3	987.4	977.9	979.8
10°	991.2	994.1	962.6	946.4	944.5
12.5°	977.9	974.0	933.0	909.2	903.4
15°	960.7	950.2	898.7	867.2	856.7
17.5°	940.6	922.5	860.5	819.5	804.2
20°	919.7	892.9	818.5	766.1	747.0
22.5°	894.9	861.5	773.7	709.8	687.8
25°	869.1	826.2	726.0	652.5	625.8
27.5°	842.4	789.9	676.4	594.3	567.6
30°	812.8	750.8	624.9	536.1	503.7
32.5°	781.3	710.7	573.4	478.9	448.4
35°	748.9	669.7	521.8	422.6	392.1
37.5°	715.5	627.7	470.3	369.2	338.7
40°	680.2	584.8	418.8	318.6	289.1
42.5°	644.0	540.9	369.2	270.9	243.3
45°	608.7	497.0	321.5	226.1	199.4
47.5°	571.4	453.2	274.8	184.1	161.2
50°	534.2	409.3	229.9	147.9	132.6
52.5°	496.1	365.4	188.9	121.2	110.7
55°	457.9	321.5	151.7	101.1	94.4
57.5°	419.8	277.6	117.3	85.9	78.2
60°	381.6	234.7	91.6	69.6	63.0
62.5°	342.5	191.8	75.4	55.3	49.6
65°	303.4	152.6	60.1	42.9	39.1
67.5°	264.3	116.4	45.8	33.4	30.5
70°	222.3	83.0	34.3	25.8	24.8
72.5°	186.0	56.3	24.8	20.0	19.1
75°	146.9	40.1	18.1	15.3	14.3
77.5°	113.5	25.8	13.4	12.4	11.4
80°	79.2	14.3	9.5	8.6	8.6
82.5°	48.7	7.6	6.7	5.7	5.7
85°	21.9	3.8	3.8	3.8	3.8
87.5°	3.8	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)