

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: P1001066

Luminaire Tested: S124RDR-B350DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001066
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-B350DB2750-4F0-XX-W2A-F_2700K
Description: Define 4 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

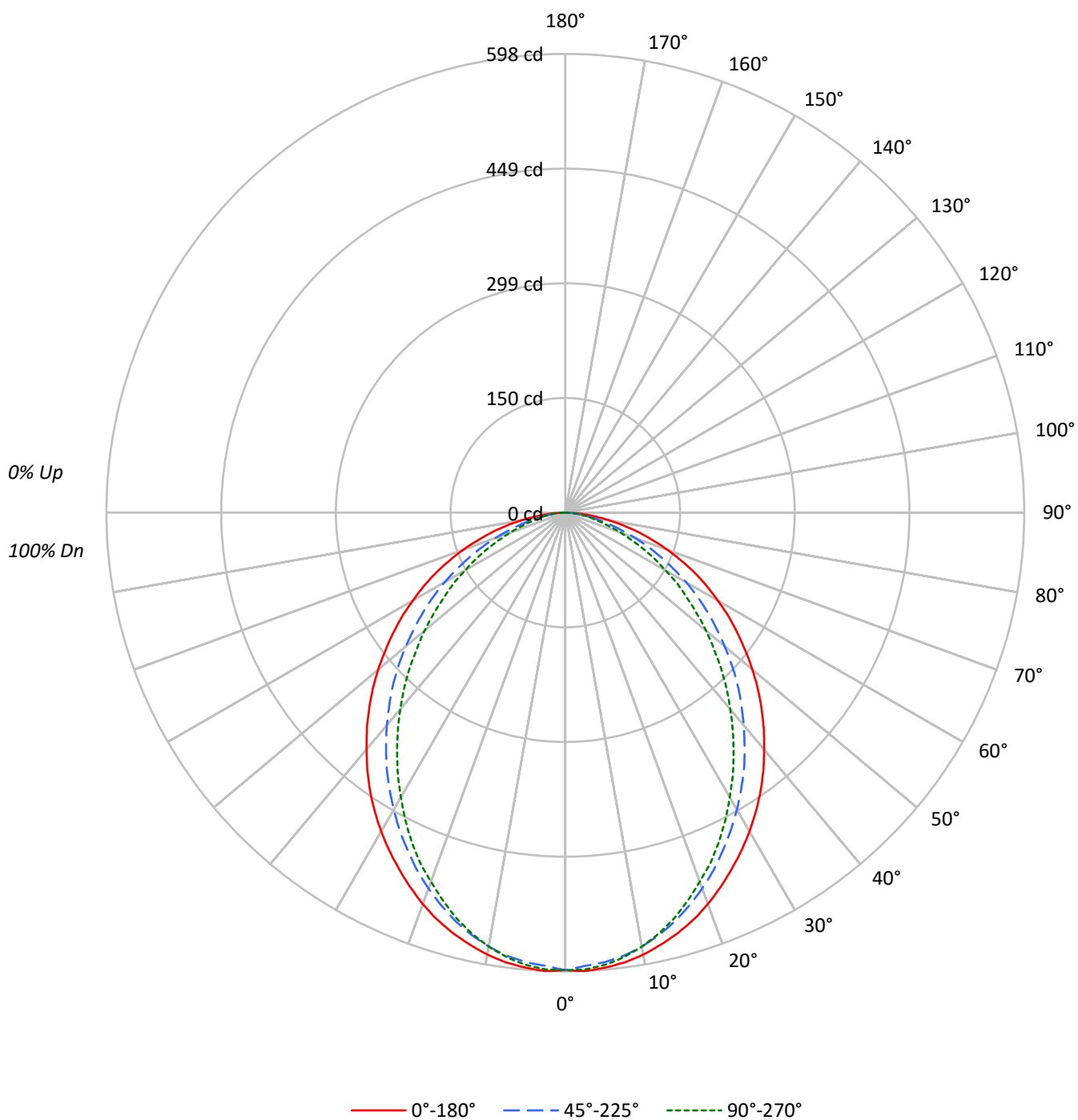
Lumens per Lamp: N/A
Luminaire Lumens: 1378.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	74	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	64	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	56	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	43	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	39	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	35	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	32	32	30
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4863	4863	4863
5°	4875	4815	4844
10°	4844	4757	4757
15°	4788	4657	4622
20°	4712	4525	4442
25°	4614	4372	4260
30°	4519	4210	4033
35°	4414	4042	3805
40°	4288	3850	3559
45°	4171	3660	3307
50°	4038	3440	3041
55°	3895	3213	2752
60°	3738	2963	2458
65°	3595	2653	2167
70°	3386	2308	1841
75°	3122	1912	1497
80°	2724	1460	1371
85°	2311	1329	1235

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4171 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	4.1
10°-20°	156.4	11.3
20°-30°	225.7	16.4
30°-40°	255.9	18.6
40°-50°	247.0	17.9
50°-60°	205.4	14.9
60°-70°	141.8	10.3
70°-80°	71.6	5.2
80°-90°	18.2	1.3
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°	438.2	31.8
0°-40°	694.0	50.4
0°-60°	1146.4	83.2
0°-90°	1378.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1378.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	596	596	596	596	596	
5°	596	594	588	593	592	57
15°	567	563	552	551	548	160
25°	513	505	486	478	474	236
35°	443	429	406	390	382	277
45°	362	345	317	295	287	279
55°	274	256	226	202	194	245
65°	186	167	138	118	112	184
75°	99	82	61	50	48	105
85°	25	16	14	13	13	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.4	596.4	596.4	596.4	596.4
2.5°	598.2	596.4	591.4	596.4	595.9
5°	595.5	593.6	588.2	592.7	591.8
7.5°	591.4	589.5	582.7	585.9	584.5
10°	585.0	582.7	574.5	576.3	574.5
12.5°	576.7	574.0	564.0	564.9	562.1
15°	567.2	563.0	551.6	550.7	547.5
17.5°	556.2	550.3	537.0	534.7	530.2
20°	543.0	537.0	521.5	517.8	511.9
22.5°	528.3	521.5	504.6	498.7	494.1
25°	512.8	504.6	485.9	478.1	473.5
27.5°	496.8	486.8	467.1	458.0	451.6
30°	479.9	468.5	447.1	435.6	428.3
32.5°	462.1	448.9	426.5	412.8	406.0
35°	443.4	428.8	406.0	390.4	382.2
37.5°	423.8	408.7	383.6	366.7	358.5
40°	402.8	387.7	361.7	342.5	334.3
42.5°	382.7	366.7	339.3	319.7	311.0
45°	361.7	344.8	317.4	295.0	286.8
47.5°	340.2	322.8	294.5	271.2	262.1
50°	318.3	300.5	271.2	248.4	239.7
52.5°	295.9	278.6	248.4	225.1	216.0
55°	274.0	255.7	226.0	202.3	193.6
57.5°	252.5	233.3	204.1	179.9	173.5
60°	229.2	211.0	181.7	158.0	150.7
62.5°	208.2	189.1	158.9	137.5	132.0
65°	186.3	166.7	137.5	117.8	112.3
67.5°	163.5	144.8	117.4	100.0	93.6
70°	142.0	122.8	96.8	81.7	77.2
72.5°	119.2	102.3	78.1	65.8	61.6
75°	99.1	82.2	60.7	50.2	47.5
77.5°	78.1	63.5	45.2	37.9	37.0
80°	58.0	44.8	31.1	29.7	29.2
82.5°	40.6	28.8	22.4	21.5	21.0
85°	24.7	15.5	14.2	13.2	13.2
87.5°	10.5	6.8	6.4	5.9	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)