

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: P1001068

Luminaire Tested: S124RDR-B350DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001068
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_3500K
Description: Define 4 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

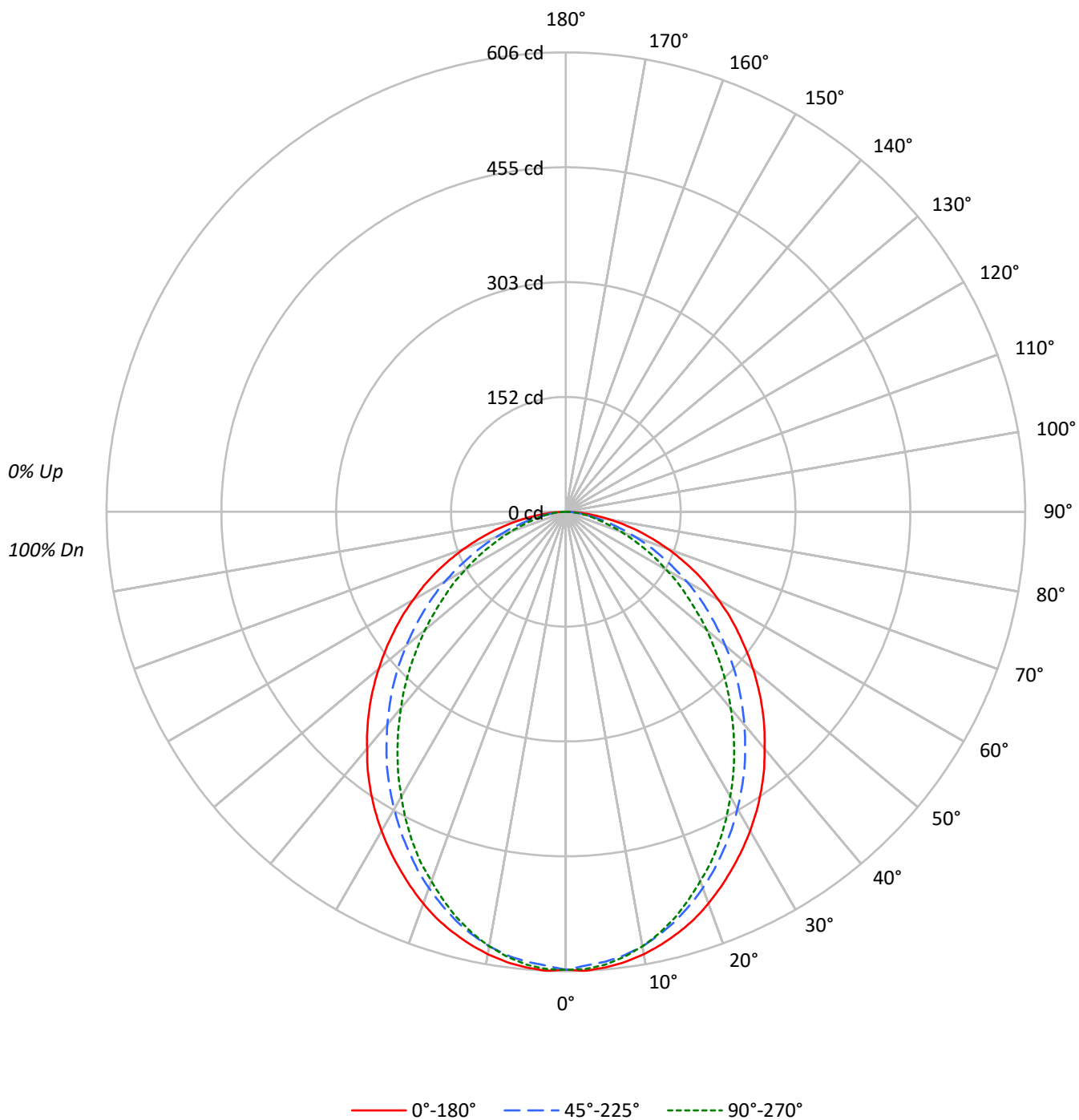
Lumens per Lamp: N/A
Luminaire Lumens: 1396.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4927	4927	4927
5°	4938	4877	4907
10°	4907	4819	4819
15°	4851	4717	4683
20°	4773	4584	4500
25°	4674	4429	4316
30°	4578	4264	4086
35°	4472	4094	3854
40°	4343	3900	3604
45°	4225	3708	3350
50°	4090	3486	3081
55°	3947	3256	2788
60°	3787	3002	2490
65°	3641	2686	2196
70°	3431	2339	1864
75°	3163	1938	1515
80°	2761	1479	1390
85°	2339	1338	1254

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	4.1
10°-20°	158.4	11.3
20°-30°	228.7	16.4
30°-40°	259.2	18.6
40°-50°	250.3	17.9
50°-60°	208.1	14.9
60°-70°	143.6	10.3
70°-80°	72.6	5.2
80°-90°	18.4	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°	443.9	31.8
0°-40°	703.1	50.4
0°-60°	1161.4	83.2
0°-90°	1396.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1396.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	603	601	596	600	600	57
15°	575	570	559	558	555	162
25°	520	511	492	484	480	239
35°	449	434	411	396	387	281
45°	366	349	322	299	290	283
55°	278	259	229	205	196	248
65°	189	169	139	119	114	186
75°	100	83	62	51	48	106
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°	604.2	604.2	604.2	604.2	604.2
2.5°	606.0	604.2	599.1	604.2	603.7
5°	603.2	601.4	595.8	600.5	599.5
7.5°	599.1	597.2	590.3	593.5	592.1
10°	592.6	590.3	582.0	583.8	582.0
12.5°	584.3	581.5	571.3	572.3	569.5
15°	574.6	570.4	558.8	557.9	554.7
17.5°	563.5	557.4	544.0	541.7	537.1
20°	550.0	544.0	528.3	524.6	518.6
22.5°	535.2	528.3	511.2	505.2	500.5
25°	519.5	511.2	492.2	484.4	479.7
27.5°	503.3	493.1	473.3	464.0	457.5
30°	486.2	474.6	452.9	441.3	433.9
32.5°	468.2	454.7	432.1	418.2	411.3
35°	449.2	434.4	411.3	395.5	387.2
37.5°	429.3	414.0	388.6	371.5	363.1
40°	408.0	392.8	366.4	347.0	338.6
42.5°	387.7	371.5	343.7	323.8	315.0
45°	366.4	349.3	321.5	298.8	290.5
47.5°	344.6	327.1	298.4	274.8	265.5
50°	322.4	304.4	274.8	251.7	242.9
52.5°	299.8	282.2	251.7	228.1	218.8
55°	277.6	259.1	229.0	204.9	196.1
57.5°	255.8	236.4	206.8	182.3	175.8
60°	232.2	213.7	184.1	160.1	152.7
62.5°	211.0	191.5	161.0	139.2	133.7
65°	188.7	168.9	139.2	119.4	113.8
67.5°	165.6	146.6	118.9	101.3	94.8
70°	143.9	124.4	98.1	82.8	78.2
72.5°	120.7	103.6	79.1	66.6	62.5
75°	100.4	83.3	61.5	50.9	48.1
77.5°	79.1	64.3	45.8	38.4	37.5
80°	58.8	45.3	31.5	30.1	29.6
82.5°	41.2	29.1	22.7	21.7	21.3
85°	25.0	15.7	14.3	13.4	13.4
87.5°	10.6	6.9	6.5	6.0	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)