

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: P1001069

Luminaire Tested: S124RDR-B350DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001069
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_4000K
Description: Define 4 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

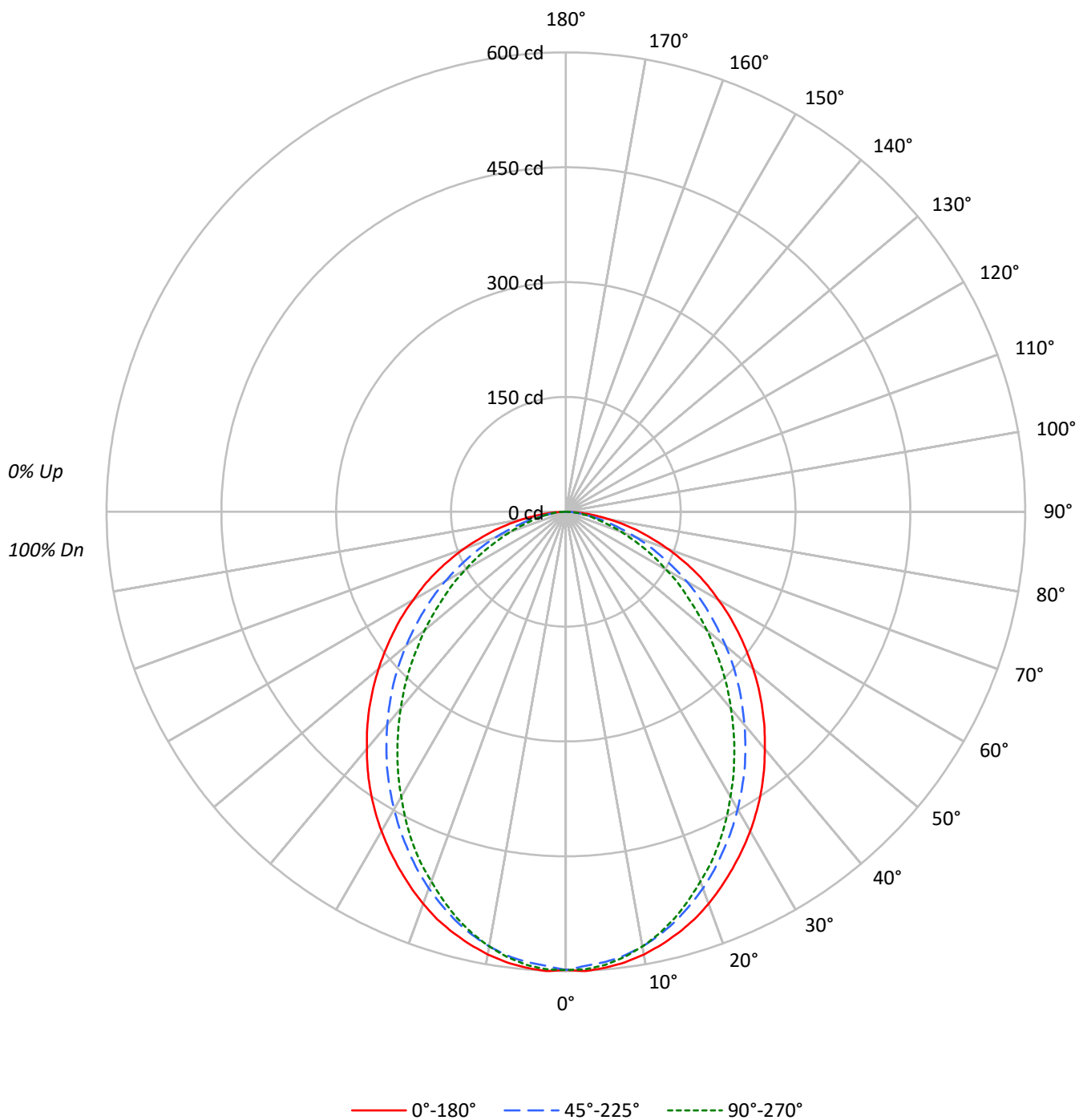
Lumens per Lamp: N/A
Luminaire Lumens: 1383.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1001069

CATALOG NUMBER: S124RDR-B350DB2750-4F0-XX-W2A-F_4000K

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°	4880	4880	4880
5°	4892	4832	4862
10°	4861	4774	4774
15°	4805	4674	4639
20°	4729	4542	4459
25°	4631	4387	4276
30°	4536	4225	4048
35°	4430	4056	3819
40°	4303	3864	3571
45°	4186	3673	3319
50°	4052	3453	3052
55°	3910	3226	2762
60°	3753	2975	2466
65°	3608	2661	2175
70°	3398	2317	1848
75°	3135	1922	1503
80°	2733	1465	1376
85°	2311	1329	1244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4186 cd/sqm

TEST NUMBER: P1001069

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	4.1
10°-20°	156.9	11.3
20°-30°	226.6	16.4
30°-40°	256.8	18.6
40°-50°	247.9	17.9
50°-60°	206.1	14.9
60°-70°	142.3	10.3
70°-80°	71.9	5.2
80°-90°	18.3	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°	439.8	31.8
0°-40°	696.6	50.4
0°-60°	1150.6	83.2
0°-90°	1383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1383.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	598	596	590	595	594	57
15°	569	565	554	553	550	160
25°	515	506	488	480	475	237
35°	445	430	407	392	384	278
45°	363	346	318	296	288	280
55°	275	257	227	203	194	246
65°	187	167	138	118	113	185
75°	100	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°	598.5	598.5	598.5	598.5	598.5
2.5°	600.4	598.5	593.5	598.5	598.1
5°	597.6	595.8	590.3	594.9	594.0
7.5°	593.5	591.7	584.8	588.0	586.6
10°	587.1	584.8	576.5	578.4	576.5
12.5°	578.8	576.1	566.0	566.9	564.2
15°	569.2	565.1	553.6	552.7	549.5
17.5°	558.2	552.3	539.0	536.7	532.1
20°	544.9	539.0	523.4	519.7	513.8
22.5°	530.3	523.4	506.4	500.5	495.9
25°	514.7	506.4	487.6	479.8	475.3
27.5°	498.6	488.6	468.8	459.7	453.3
30°	481.7	470.2	448.7	437.2	429.9
32.5°	463.8	450.5	428.1	414.3	407.4
35°	445.0	430.3	407.4	391.8	383.6
37.5°	425.3	410.2	385.0	368.0	359.8
40°	404.2	389.1	363.0	343.7	335.5
42.5°	384.1	368.0	340.5	320.8	312.1
45°	363.0	346.0	318.5	296.1	287.8
47.5°	341.4	324.0	295.6	272.2	263.1
50°	319.4	301.6	272.2	249.3	240.6
52.5°	297.0	279.6	249.3	225.9	216.8
55°	275.0	256.6	226.9	203.0	194.3
57.5°	253.4	234.2	204.9	180.6	174.2
60°	230.1	211.7	182.4	158.6	151.2
62.5°	209.0	189.7	159.5	137.9	132.4
65°	187.0	167.3	137.9	118.2	112.7
67.5°	164.1	145.3	117.8	100.4	94.0
70°	142.5	123.3	97.2	82.0	77.5
72.5°	119.6	102.7	78.4	66.0	61.9
75°	99.5	82.5	61.0	50.4	47.7
77.5°	78.4	63.7	45.4	38.0	37.1
80°	58.2	44.9	31.2	29.8	29.3
82.5°	40.8	28.9	22.5	21.5	21.1
85°	24.7	15.6	14.2	13.3	13.3
87.5°	10.5	6.9	6.4	6.0	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)