

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: P1001397

Luminaire Tested: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001397
REPORT IS A COMBINATION OF REPORTS P996016 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

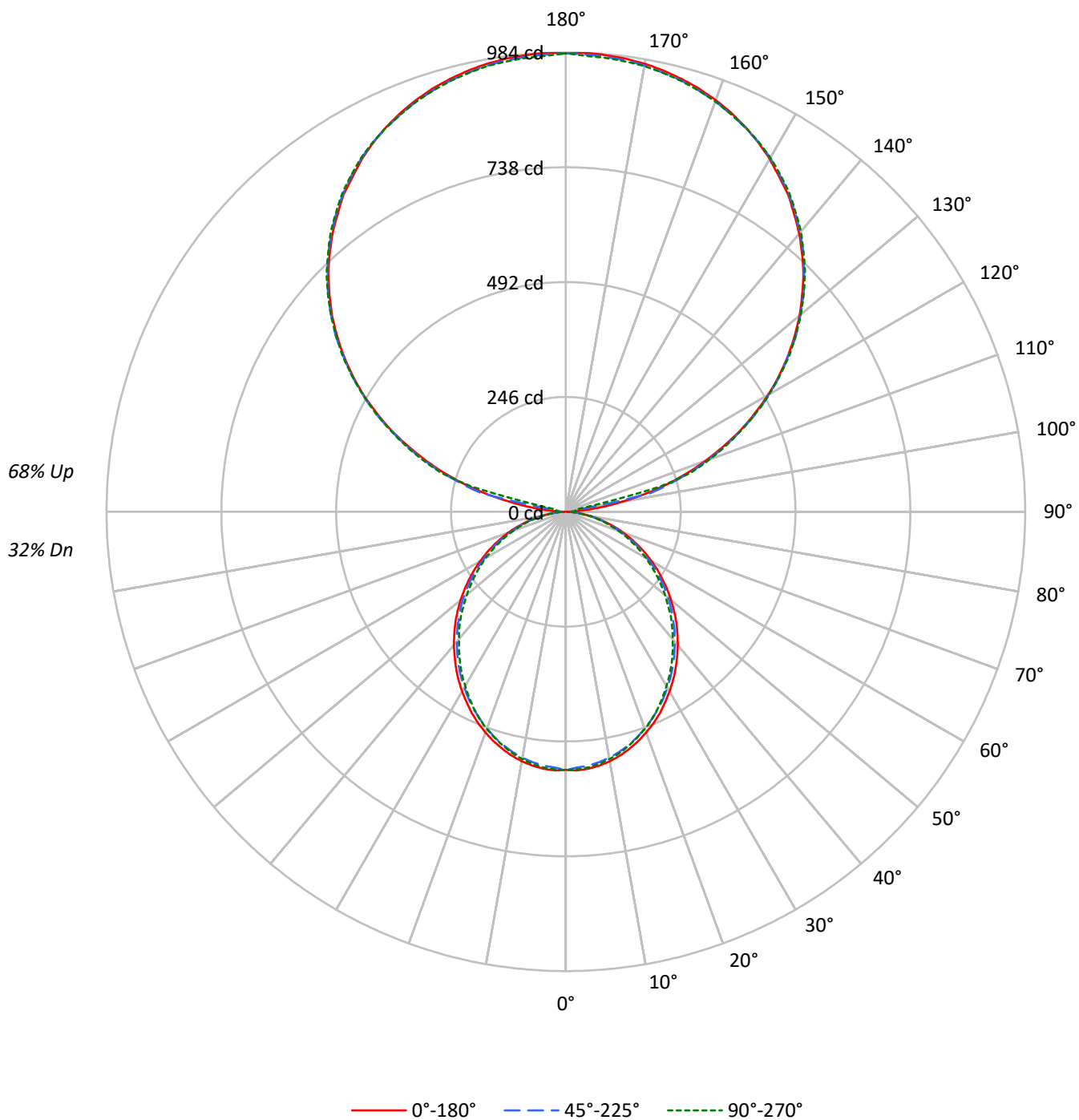
Lumens per Lamp: N/A
Luminaire Lumens: 4459.0 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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: P1001397

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F

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
RCR																	
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	39	39	39
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33
2	85	78	72	67	76	70	65	61	56	53	50	43	41	38	31	29	28
3	78	69	61	56	70	62	56	51	49	45	42	38	35	33	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	12
9	48	36	28	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

TEST NUMBER: P1001397

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.2
10°-20°	146.8	3.3
20°-30°	216.1	4.8
30°-40°	251.2	5.6
40°-50°	251.1	5.6
50°-60°	219.6	4.9
60°-70°	163.1	3.7
70°-80°	92.5	2.1
80°-90°	28.5	0.6
90°-100°	32.6	0.7
100°-110°	214.6	4.8
110°-120°	409.8	9.2
120°-130°	520.3	11.7
130°-140°	556.6	12.5
140°-150°	520.4	11.7
150°-160°	419.7	9.4
160°-170°	270.7	6.1
170°-180°	93.3	2.1
0°-30°	415.0	9.3
0°-40°	666.1	14.9
0°-60°	1136.9	25.5
0°-90°	1421.0	31.9
90°-120°	657.0	14.7
90°-150°	2254.3	50.6
90°-180°	3038.0	68.1
0°-180°	4459.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	26
90°	2	10	16	21	22	4
95°	40	15	16	21	21	50
105°	221	225	229	236	209	231
115°	413	415	414	416	416	406
125°	580	583	582	584	584	518
135°	720	719	722	723	725	554
145°	830	832	832	833	834	518
155°	910	911	908	911	909	420
165°	960	956	956	962	955	271
175°	982	977	978	985	976	93
180°	982	982	982	982	982	

TEST NUMBER: P1001397

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
90°	2.2	10.3	16.2	20.6	22.0
92.5°	11.0	9.5	15.4	19.8	19.8
95°	40.4	15.4	16.2	20.6	21.3
97.5°	77.1	93.3	16.2	19.8	20.6
100°	120.4	133.6	32.3	19.8	20.6
102.5°	168.9	177.7	186.5	21.3	21.3
105°	221.0	225.4	229.1	235.7	209.3
107.5°	268.8	271.0	276.1	279.8	282.7
110°	317.2	319.4	323.8	325.3	327.5

TEST NUMBER: P1001397

CATALOG NUMBER: SA4XXDIP-B350D810UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.2	368.6	370.1	369.4	372.3
115°	412.7	414.9	414.2	415.6	415.6
117.5°	456.0	458.9	461.2	460.4	460.4
120°	500.1	503.0	502.3	503.7	502.3
122.5°	541.2	542.7	544.1	544.9	543.4
125°	580.1	583.0	581.6	583.8	584.5
127.5°	617.6	618.3	622.0	621.2	620.5
130°	653.5	654.3	656.5	657.2	657.2
132.5°	686.6	688.1	691.0	691.7	691.0
135°	719.6	718.9	721.8	723.3	724.8
137.5°	749.0	749.0	752.7	754.1	753.4
140°	777.6	779.1	780.6	782.8	783.5
142.5°	803.3	806.3	807.0	808.5	808.5
145°	829.8	832.0	832.0	832.7	834.2
147.5°	850.3	854.7	854.0	854.7	855.5
150°	873.1	876.0	875.3	875.3	876.0
152.5°	892.2	894.4	892.9	894.4	893.7
155°	909.8	910.6	908.3	911.3	909.1
157.5°	925.2	925.2	922.3	926.0	922.3
160°	938.5	936.3	935.5	939.9	935.5
162.5°	950.2	947.3	946.5	950.9	945.8
165°	959.8	956.1	956.1	962.0	955.3
167.5°	967.8	964.2	963.4	970.0	962.7
170°	974.4	970.0	970.8	976.6	969.3
172.5°	978.8	974.4	975.2	981.0	973.0
175°	981.8	977.4	978.1	984.7	975.9
177.5°	984.0	978.8	980.3	986.2	977.4
180°	981.8	981.8	981.8	981.8	981.8

(END OF REPORT)