

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: P1001385

Luminaire Tested: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001385
REPORT IS A COMBINATION OF REPORTS P996004 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

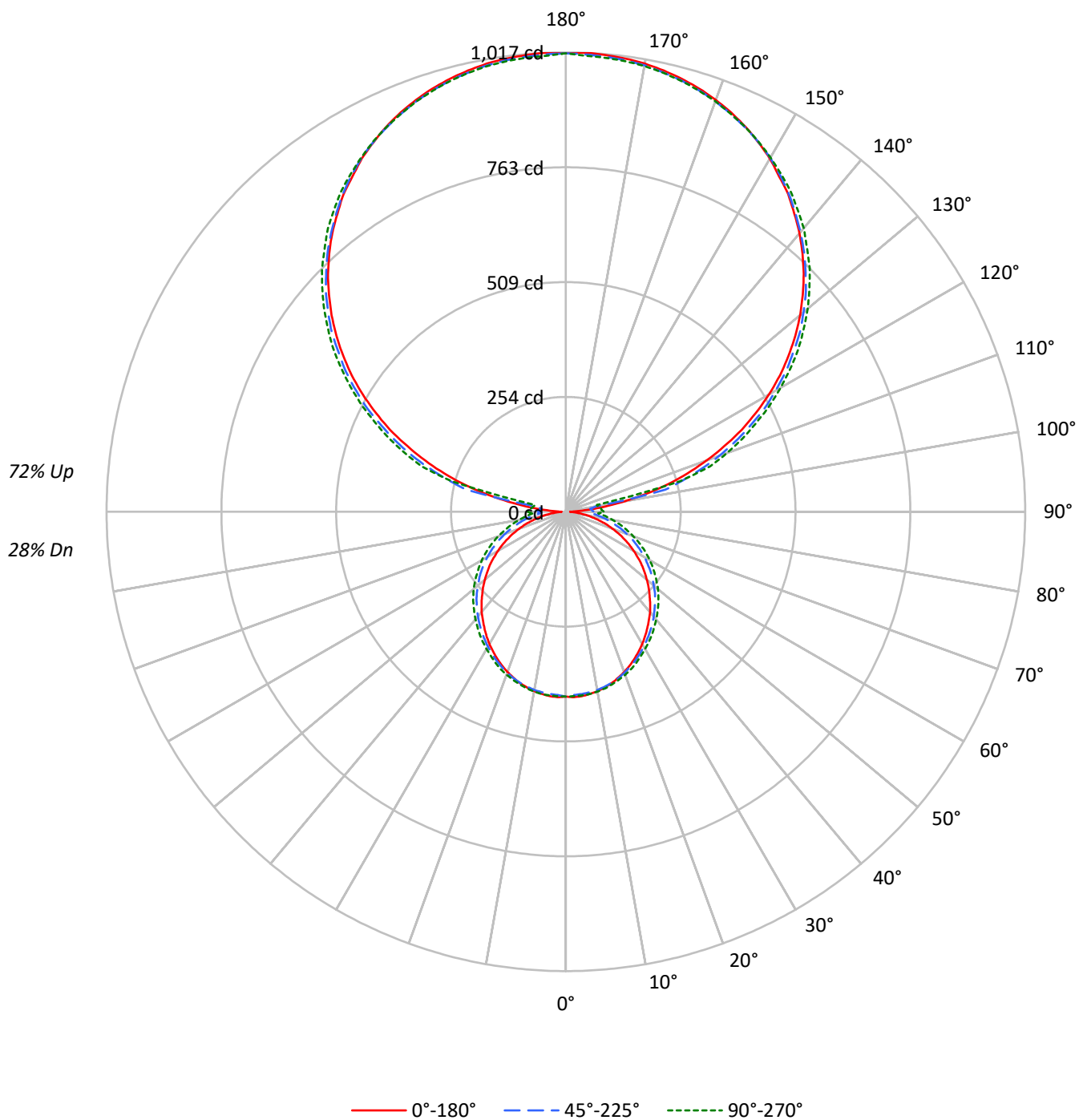
Lumens per Lamp: N/A
Luminaire Lumens: 4538.0 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1001385

CATALOG NUMBER: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1001385

CATALOG NUMBER: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36			28
1	92	88	84	80	82	79	75	72	62	59	57	46	44	43	31	30	29			23
2	84	76	70	65	75	68	63	59	54	50	47	40	37	35	27	26	24			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	20			15
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	22	19	17	15			11
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13			10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	16	13	12			9
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10			8
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9			7
10	43	31	24	20	39	28	22	18	23	18	15	17	14	12	12	10	8			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3337	3337	3337
5°	3346	3249	3255
10°	3324	3186	3176
15°	3293	3114	3087
20°	3246	3036	3001
25°	3195	2950	2907
30°	3138	2865	2813
35°	3075	2778	2728
40°	3024	2695	2640
45°	2949	2616	2563
50°	2884	2527	2481
55°	2818	2441	2386
60°	2715	2335	2298
65°	2600	2220	2192
70°	2463	2088	2069
75°	2271	1942	1952
80°	2052	1793	1828
85°	1768	1643	1729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3131 cd/sqm

TEST NUMBER: P1001385

CATALOG NUMBER: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	0.9
10°-20°	111.1	2.4
20°-30°	168.0	3.7
30°-40°	203.2	4.5
40°-50°	214.8	4.7
50°-60°	202.2	4.5
60°-70°	167.7	3.7
70°-80°	117.7	2.6
80°-90°	68.5	1.5
90°-100°	73.2	1.6
100°-110°	251.1	5.5
110°-120°	443.3	9.8
120°-130°	549.0	12.1
130°-140°	580.2	12.8
140°-150°	539.0	11.9
150°-160°	433.9	9.6
160°-170°	279.8	6.2
170°-180°	96.4	2.1
0°-30°	317.8	7.0
0°-40°	521.0	11.5
0°-60°	938.0	20.7
0°-90°	1291.9	28.5
90°-120°	767.7	16.9
90°-150°	2435.9	53.7
90°-180°	3246.0	71.5
0°-180°	4538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	409	409	409	409	409	
5°	410	408	405	409	408	39
15°	393	393	392	396	395	111
25°	359	362	363	368	369	165
35°	314	320	324	331	332	197
45°	262	271	280	287	290	203
55°	205	215	229	238	240	183
65°	142	157	172	184	187	141
75°	79	96	115	128	132	84
85°	24	44	64	78	82	25
90°	10	36	62	80	85	7
95°	48	37	57	74	78	56
105°	233	246	267	285	262	244
115°	429	436	450	461	464	423
125°	602	604	614	625	629	537
135°	745	744	750	759	764	574
145°	858	860	860	864	867	536
155°	941	941	939	942	940	434
165°	992	988	988	994	988	280
175°	1015	1010	1011	1018	1009	97
180°	1015	1015	1015	1015	1015	

TEST NUMBER: P1001385

CATALOG NUMBER: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	409.2	409.2	409.2	409.2	409.2
2.5°	411.0	409.6	406.0	409.2	408.7
5°	409.6	408.2	405.0	408.7	408.2
7.5°	406.9	406.0	403.2	407.3	406.9
10°	403.2	402.7	400.5	404.6	404.1
12.5°	398.2	398.2	396.8	400.5	400.5
15°	392.7	393.1	391.8	395.9	395.4
17.5°	385.3	386.7	386.3	390.4	389.9
20°	377.5	378.9	379.4	384.0	384.0
22.5°	368.8	370.7	371.6	376.2	377.1
25°	359.2	362.0	363.3	368.4	368.8
27.5°	348.7	352.8	354.6	359.2	359.7
30°	338.1	341.8	345.0	350.1	351.0
32.5°	326.7	331.3	334.9	340.9	341.8
35°	314.3	319.8	324.4	330.8	332.2
37.5°	301.9	308.4	313.9	320.3	321.6
40°	290.0	296.0	302.4	309.3	311.1
42.5°	276.3	283.2	290.9	298.7	300.1
45°	262.1	270.8	279.5	287.3	289.6
47.5°	248.8	257.5	267.6	275.4	278.1
50°	234.1	244.2	254.3	263.5	266.2
52.5°	219.5	229.6	241.5	250.6	253.4
55°	205.3	214.9	228.6	237.8	240.5
57.5°	189.2	201.1	214.4	225.4	227.7
60°	173.7	185.6	200.7	211.2	214.9
62.5°	158.5	171.8	186.9	197.5	201.1
65°	142.0	156.7	172.3	183.7	187.4
67.5°	126.5	142.0	158.5	170.0	173.7
70°	110.4	126.0	143.4	155.8	159.0
72.5°	94.8	110.9	129.7	141.6	145.2
75°	78.8	95.8	115.0	127.8	132.0
77.5°	63.7	81.6	101.7	114.5	119.1
80°	49.9	68.3	88.4	102.2	105.8
82.5°	36.2	55.4	75.6	89.8	93.9
85°	24.3	43.5	64.1	77.9	82.5
87.5°	15.1	33.9	54.1	67.4	71.5
90°	9.6	36.3	62.1	79.9	85.1
92.5°	18.3	32.8	58.5	75.9	79.6
95°	47.8	37.0	56.6	73.5	78.4
97.5°	85.2	115.2	54.3	70.0	74.9
100°	129.5	155.2	68.2	67.7	71.7
102.5°	179.6	198.8	225.3	66.4	70.1
105°	232.6	246.4	267.1	285.4	261.8
107.5°	282.0	292.0	313.4	328.7	334.9
110°	331.7	340.3	360.9	373.0	378.9

TEST NUMBER: P1001385

CATALOG NUMBER: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.8	389.8	406.4	415.8	422.5
115°	429.4	435.8	449.7	461.3	464.5
117.5°	474.2	480.0	496.0	504.9	508.5
120°	519.3	523.7	536.3	546.9	549.1
122.5°	561.8	563.3	577.3	587.1	588.8
125°	601.6	604.2	614.1	625.1	628.6
127.5°	640.3	640.6	653.5	661.1	663.5
130°	677.1	677.3	686.9	696.0	698.7
132.5°	711.2	712.3	720.8	729.4	731.4
135°	744.9	744.2	750.4	759.3	763.5
137.5°	775.3	774.9	780.5	788.9	790.4
140°	804.9	806.0	807.9	816.2	819.3
142.5°	831.1	834.1	834.4	840.9	842.8
145°	858.4	860.2	860.2	863.6	867.0
147.5°	879.6	883.7	882.9	884.2	886.8
150°	903.2	905.7	905.0	905.0	905.7
152.5°	922.4	924.7	923.2	924.7	923.9
155°	940.6	941.4	939.1	942.2	939.9
157.5°	956.6	956.6	953.5	957.3	953.5
160°	970.3	968.0	967.2	971.8	967.2
162.5°	982.4	979.4	978.6	983.2	977.8
165°	992.3	988.5	988.5	994.5	987.7
167.5°	1000.6	996.8	996.1	1002.9	995.3
170°	1007.5	1002.9	1003.7	1009.7	1002.1
172.5°	1012.0	1007.5	1008.2	1014.3	1005.9
175°	1015.0	1010.5	1011.2	1018.1	1009.0
177.5°	1017.3	1012.0	1013.5	1019.6	1010.5
180°	1015.0	1015.0	1015.0	1015.0	1015.0

(END OF REPORT)