

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: P1001020

Luminaire Tested: SA4XXDIP-B1195D590UB35-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001020
REPORT IS A COMBINATION OF REPORTS P995636 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

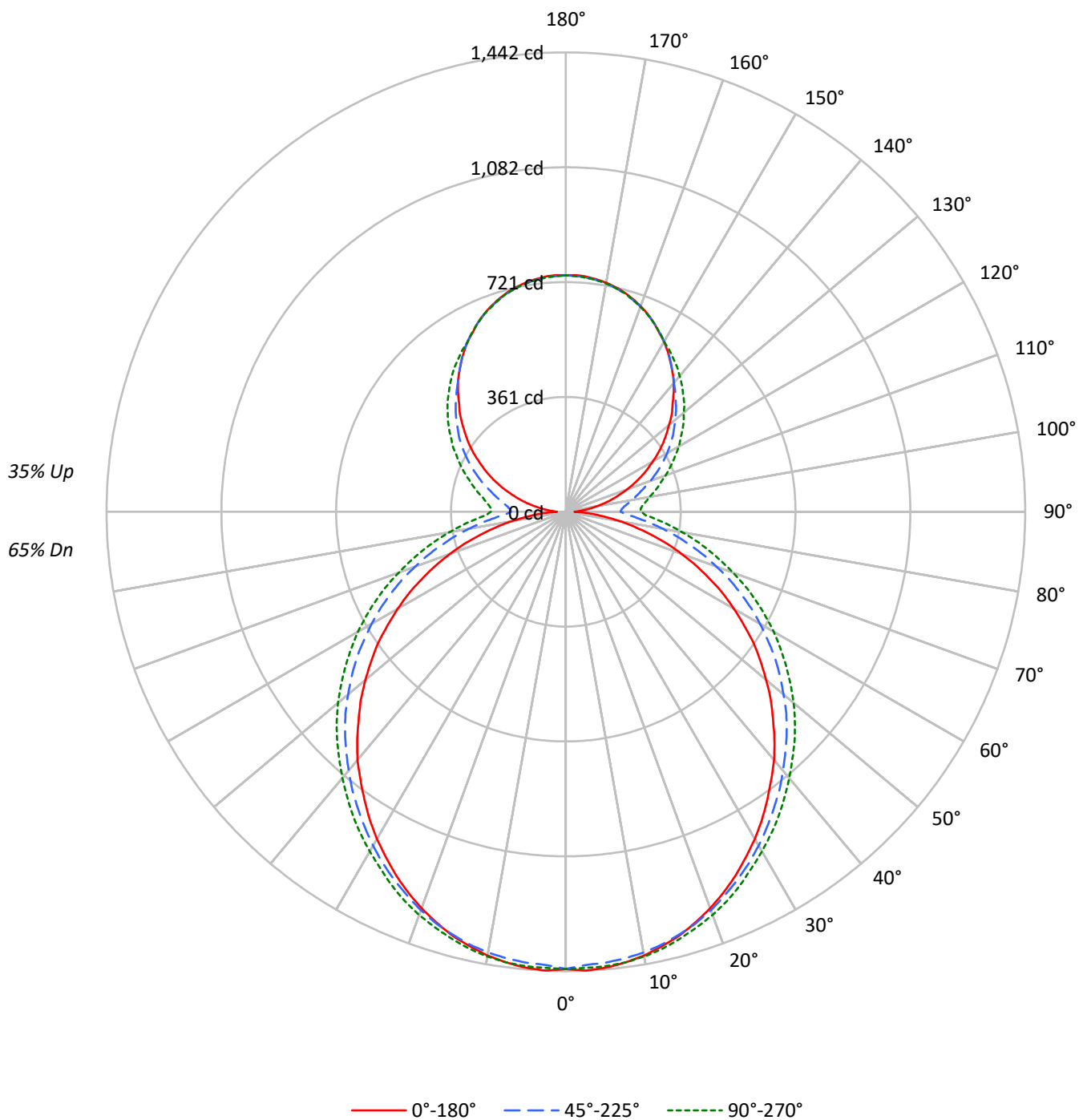
Lumens per Lamp: N/A
Luminaire Lumens: 6954.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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
RCR																					
0	111	111	111	111		104	104	104	104		92	92	92		80	80	80		70	70	70
1	100	95	90	86		94	89	85	82		79	76	73		69	67	64		60	58	57
2	90	82	75	69		85	77	71	66		68	63	59		60	56	53		52	49	47
3	82	72	64	57		77	68	60	54		60	54	49		52	48	44		45	42	39
4	75	63	55	48		70	60	52	46		53	46	42		46	41	37		40	36	33
5	69	56	47	41		64	53	45	39		47	41	36		41	36	32		36	32	29
6	63	50	42	35		59	48	40	34		42	36	31		37	32	28		33	28	25
7	59	45	37	31		55	43	35	30		38	32	27		34	29	25		30	26	22
8	54	41	33	27		51	39	32	26		35	29	24		31	26	22		27	23	20
9	51	38	30	24		47	36	28	24		32	26	22		29	23	20		25	21	18
10	47	35	27	22		44	33	26	21		30	24	19		26	21	18		23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11702	11702	11702
5°	11735	11398	11418
10°	11659	11173	11142
15°	11550	10922	10829
20°	11388	10649	10526
25°	11206	10347	10199
30°	11008	10049	9865
35°	10786	9744	9569
40°	10607	9452	9261
45°	10343	9176	8989
50°	10116	8864	8702
55°	9883	8564	8372
60°	9521	8190	8061
65°	9124	7787	7687
70°	8641	7325	7256
75°	7965	6812	6843
80°	7206	6291	6412
85°	6200	5766	6064

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10343 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	2.0
10°-20°	389.6	5.6
20°-30°	589.1	8.5
30°-40°	712.7	10.2
40°-50°	753.4	10.8
50°-60°	709.1	10.2
60°-70°	588.4	8.5
70°-80°	412.9	5.9
80°-90°	234.4	3.4
90°-100°	187.0	2.7
100°-110°	247.5	3.6
110°-120°	315.0	4.5
120°-130°	363.4	5.2
130°-140°	381.4	5.5
140°-150°	361.7	5.2
150°-160°	301.5	4.3
160°-170°	200.6	2.9
170°-180°	70.2	1.0
0°-30°	1114.7	16.0
0°-40°	1827.4	26.3
0°-60°	3289.9	47.3
0°-90°	4525.6	65.1
90°-120°	749.5	10.8
90°-150°	1856.1	26.7
90°-180°	2428.0	34.9
0°-180°	6954.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1435	1435	1435	1435	1435	
5°	1437	1432	1421	1434	1432	136
15°	1377	1379	1374	1388	1387	388
25°	1260	1270	1274	1292	1294	580
35°	1102	1122	1138	1160	1165	690
45°	919	950	980	1008	1016	710
55°	720	754	802	834	844	642
65°	498	550	604	644	657	494
75°	276	336	403	448	463	294
85°	85	153	225	273	289	89
90°	27	98	172	222	236	20
95°	55	114	183	228	243	54
105°	148	181	243	284	299	158
115°	260	274	325	360	370	257
125°	371	369	409	438	447	331
135°	473	477	488	513	520	367
145°	573	574	574	583	588	359
155°	654	654	654	656	654	301
165°	712	711	710	713	711	201
175°	741	738	738	742	738	70
180°	742	742	742	742	742	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1435.1	1435.1	1435.1	1435.1	1435.1
2.5°	1441.6	1436.8	1423.9	1435.1	1433.5
5°	1436.8	1431.9	1420.7	1433.5	1431.9
7.5°	1427.1	1423.9	1414.3	1428.7	1427.1
10°	1414.3	1412.6	1404.6	1419.1	1417.5
12.5°	1396.6	1396.6	1391.8	1404.6	1404.6
15°	1377.3	1378.9	1374.1	1388.5	1386.9
17.5°	1351.6	1356.4	1354.8	1369.3	1367.6
20°	1324.3	1329.1	1330.7	1346.8	1346.8
22.5°	1293.7	1300.1	1303.4	1319.4	1322.6
25°	1260.0	1269.6	1274.4	1292.1	1293.7
27.5°	1223.0	1237.5	1243.9	1260.0	1261.6
30°	1186.0	1198.9	1210.2	1227.8	1231.0
32.5°	1145.9	1161.9	1174.8	1195.7	1198.9
35°	1102.5	1121.8	1137.8	1160.3	1165.2
37.5°	1059.1	1081.6	1100.9	1123.4	1128.2
40°	1017.3	1038.2	1060.7	1084.8	1091.2
42.5°	969.1	993.2	1020.5	1047.8	1052.7
45°	919.3	949.8	980.3	1007.7	1015.7
47.5°	872.7	903.2	938.5	965.9	975.5
50°	821.2	856.6	891.9	924.1	933.7
52.5°	769.8	805.2	846.9	879.1	888.7
55°	720.0	753.7	801.9	834.1	843.7
57.5°	663.7	705.5	752.1	790.7	798.7
60°	609.1	650.9	703.9	740.9	753.7
62.5°	556.1	602.7	655.7	692.7	705.5
65°	498.2	549.6	604.3	644.4	657.3
67.5°	443.6	498.2	556.1	596.2	609.1
70°	387.3	442.0	503.0	546.4	557.7
72.5°	332.7	388.9	454.8	496.6	509.5
75°	276.4	335.9	403.4	448.4	462.8
77.5°	223.4	286.1	356.8	401.8	417.8
80°	175.2	239.5	310.2	358.4	371.2
82.5°	127.0	194.5	265.2	315.0	329.5
85°	85.2	152.7	225.0	273.2	289.3
87.5°	53.0	118.9	189.6	236.2	250.7
90°	27.4	98.0	171.7	221.8	235.8
92.5°	39.0	102.8	174.8	221.5	234.9
95°	55.3	113.5	183.4	228.5	243.0
97.5°	74.4	125.6	196.1	240.2	254.6
100°	98.1	142.2	209.9	254.5	265.8
102.5°	124.5	160.3	226.0	269.6	282.9
105°	148.3	180.9	242.7	284.5	299.2
107.5°	176.4	204.3	261.0	303.5	314.2
110°	203.5	227.1	282.8	318.6	333.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.6	250.9	302.9	338.2	351.1
115°	259.9	274.4	324.6	359.5	370.1
117.5°	288.0	297.7	345.3	377.3	388.5
120°	314.5	321.7	366.6	395.8	409.9
122.5°	343.8	344.4	387.2	417.7	426.0
125°	370.9	369.3	408.9	438.3	446.8
127.5°	396.7	396.9	427.9	455.7	466.3
130°	422.7	422.8	448.5	476.4	483.7
132.5°	450.8	450.4	469.1	495.3	504.4
135°	473.3	476.8	488.1	512.6	520.5
137.5°	500.3	500.4	508.0	530.4	539.0
140°	527.3	526.8	528.4	548.8	556.2
142.5°	550.4	551.5	549.4	567.1	573.5
145°	572.8	573.5	574.0	583.1	587.8
147.5°	595.7	597.0	596.4	597.4	603.3
150°	616.4	617.1	617.1	617.1	616.5
152.5°	634.3	635.5	636.0	637.8	636.0
155°	654.4	654.4	653.8	656.1	653.8
157.5°	671.6	670.5	670.5	672.2	670.5
160°	686.5	686.0	685.4	687.1	684.3
162.5°	700.3	698.6	698.0	701.5	698.6
165°	712.4	710.7	709.5	713.0	710.7
167.5°	722.1	719.8	719.8	723.3	719.8
170°	730.2	727.3	727.9	731.3	727.3
172.5°	735.9	733.6	733.6	737.6	733.6
175°	741.1	738.2	737.6	741.7	737.6
177.5°	743.4	740.5	740.5	744.5	739.9
180°	742.2	742.2	742.2	742.2	742.2

(END OF REPORT)