

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: P1001021

Luminaire Tested: SA4XXDIP-B1195D590UB35-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001021
REPORT IS A COMBINATION OF REPORTS P995637 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-D4
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

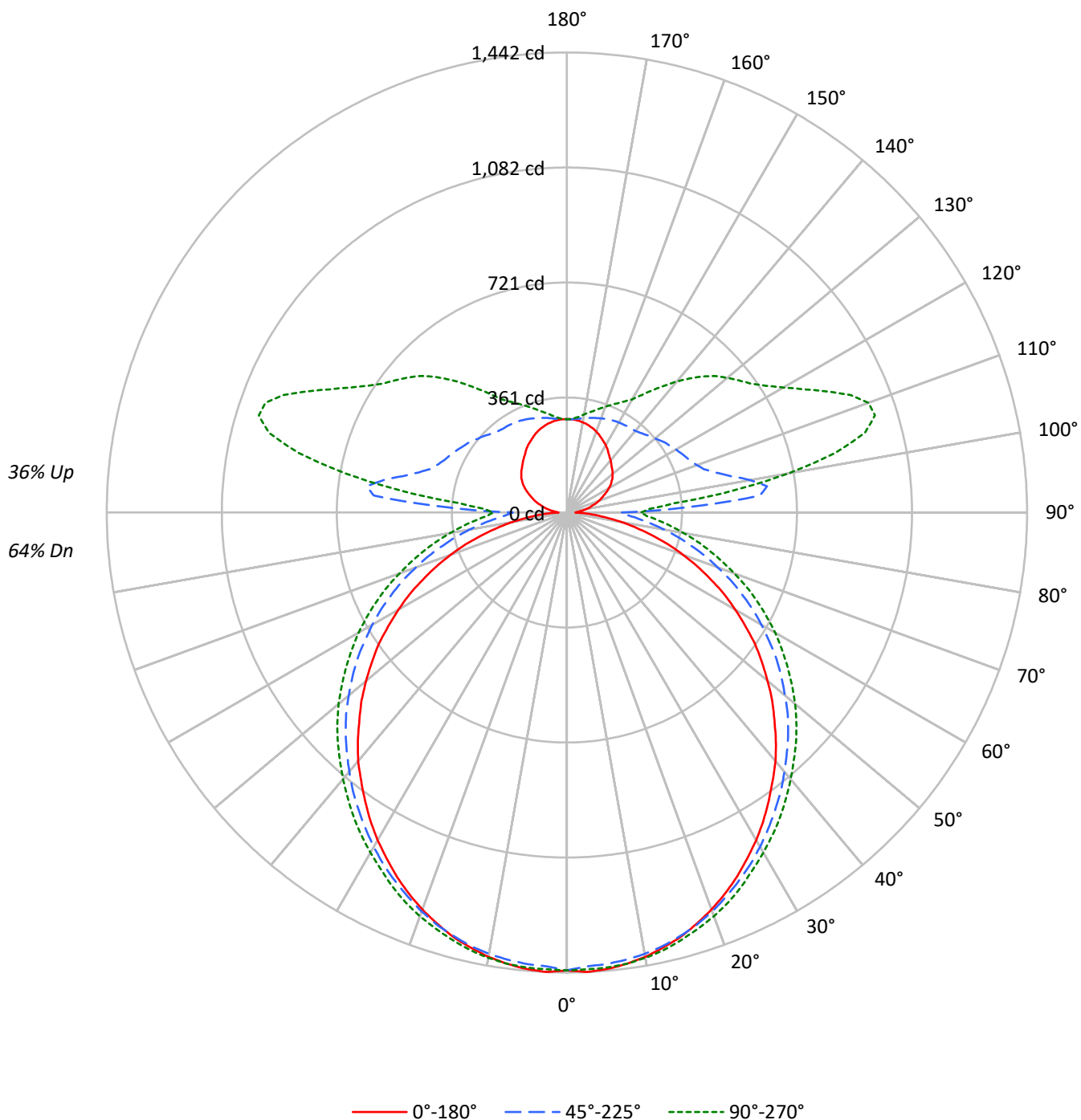
Lumens per Lamp: N/A
Luminaire Lumens: 7026.3 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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		91	91	91		80	80	80		69	69	69
1	100	95	90	86		93	89	85	81		78	75	72		68	66	64		59	58	56
2	90	82	75	69		84	77	71	66		68	63	59		59	56	52		51	49	46
3	82	72	64	57		77	67	60	54		59	54	49		52	47	44		45	42	39
4	75	63	55	48		70	59	52	46		53	46	41		46	41	37		40	36	33
5	69	56	47	41		64	53	45	39		47	40	36		41	36	32		36	32	28
6	63	50	42	35		59	47	40	34		42	36	31		37	32	28		32	28	25
7	58	45	37	31		55	43	35	30		38	32	27		34	28	25		30	25	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	23		32	26	22		28	23	20		25	21	18
10	47	35	27	22		44	33	26	21		29	23	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	1.9
10°-20°	389.6	5.5
20°-30°	589.1	8.4
30°-40°	712.7	10.1
40°-50°	753.4	10.7
50°-60°	709.1	10.1
60°-70°	588.4	8.4
70°-80°	412.9	5.9
80°-90°	233.9	3.3
90°-100°	355.6	5.1
100°-110°	544.0	7.7
110°-120°	462.3	6.6
120°-130°	369.3	5.3
130°-140°	292.5	4.2
140°-150°	213.9	3.0
150°-160°	148.1	2.1
160°-170°	87.1	1.2
170°-180°	28.3	0.4
0°-30°	1114.7	15.9
0°-40°	1827.4	26.0
0°-60°	3289.9	46.8
0°-90°	4525.2	64.4
90°-120°	1361.9	19.4
90°-150°	2237.7	31.8
90°-180°	2501.0	35.6
0°-180°	7026.3	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°	26	95	169	217	231	19
95°	40	134	608	415	338	37
105°	82	144	483	957	967	88
115°	128	172	411	756	898	127
125°	171	201	379	624	704	153
135°	199	236	346	528	603	154
145°	227	258	330	421	468	143
155°	257	277	320	363	378	118
165°	280	288	307	325	330	79
175°	292	292	294	298	297	28
180°	292	292	292	292	292	

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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°	26.3	94.6	169.4	217.2	230.7
92.5°	32.1	124.6	374.5	268.8	259.5
95°	39.8	133.6	607.6	414.8	337.8
97.5°	50.9	131.9	632.3	646.6	524.4
100°	61.3	134.1	583.6	819.8	703.1
102.5°	72.8	138.0	526.8	923.8	860.3
105°	81.7	143.9	482.6	957.0	966.7
107.5°	94.9	151.7	451.0	936.0	1012.2
110°	106.5	158.0	433.7	880.5	1005.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.4	165.6	420.5	814.6	961.8
115°	127.8	172.4	411.3	756.1	897.5
117.5°	140.5	180.0	402.7	706.8	836.2
120°	151.5	185.6	394.7	670.4	782.9
122.5°	163.0	192.6	386.0	645.0	738.8
125°	171.1	200.6	379.1	624.5	704.0
127.5°	180.3	210.8	369.9	603.2	679.8
130°	186.2	219.3	361.2	581.1	656.4
132.5°	193.6	228.0	354.3	556.3	632.9
135°	198.9	236.2	345.7	527.6	603.1
137.5°	205.8	241.8	339.2	498.7	570.0
140°	213.3	248.4	333.8	470.6	536.1
142.5°	219.7	254.4	330.6	445.6	500.5
145°	227.2	258.3	329.5	420.6	467.8
147.5°	235.8	263.4	327.7	398.5	436.8
150°	243.8	268.4	326.0	384.0	409.8
152.5°	249.7	272.9	323.2	373.1	392.6
155°	256.6	277.0	320.3	362.8	378.3
157.5°	263.5	280.6	317.4	353.0	365.1
160°	269.8	283.8	314.0	343.2	353.0
162.5°	275.5	286.4	310.5	333.8	341.5
165°	279.5	288.2	307.1	325.2	330.0
167.5°	284.1	289.6	303.6	317.7	320.9
170°	287.0	290.8	300.2	310.2	312.2
172.5°	289.9	291.6	296.7	303.6	303.6
175°	291.6	292.2	294.5	298.5	297.3
177.5°	292.7	292.2	292.7	294.8	292.7
180°	292.2	292.2	292.2	292.2	292.2

(END OF REPORT)