

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: P1000999

Luminaire Tested: SA4XXDIP-B1195D590UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000999
REPORT IS A COMBINATION OF REPORTS P995615 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB2750-4F0-XX-W2A-D_3500K
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

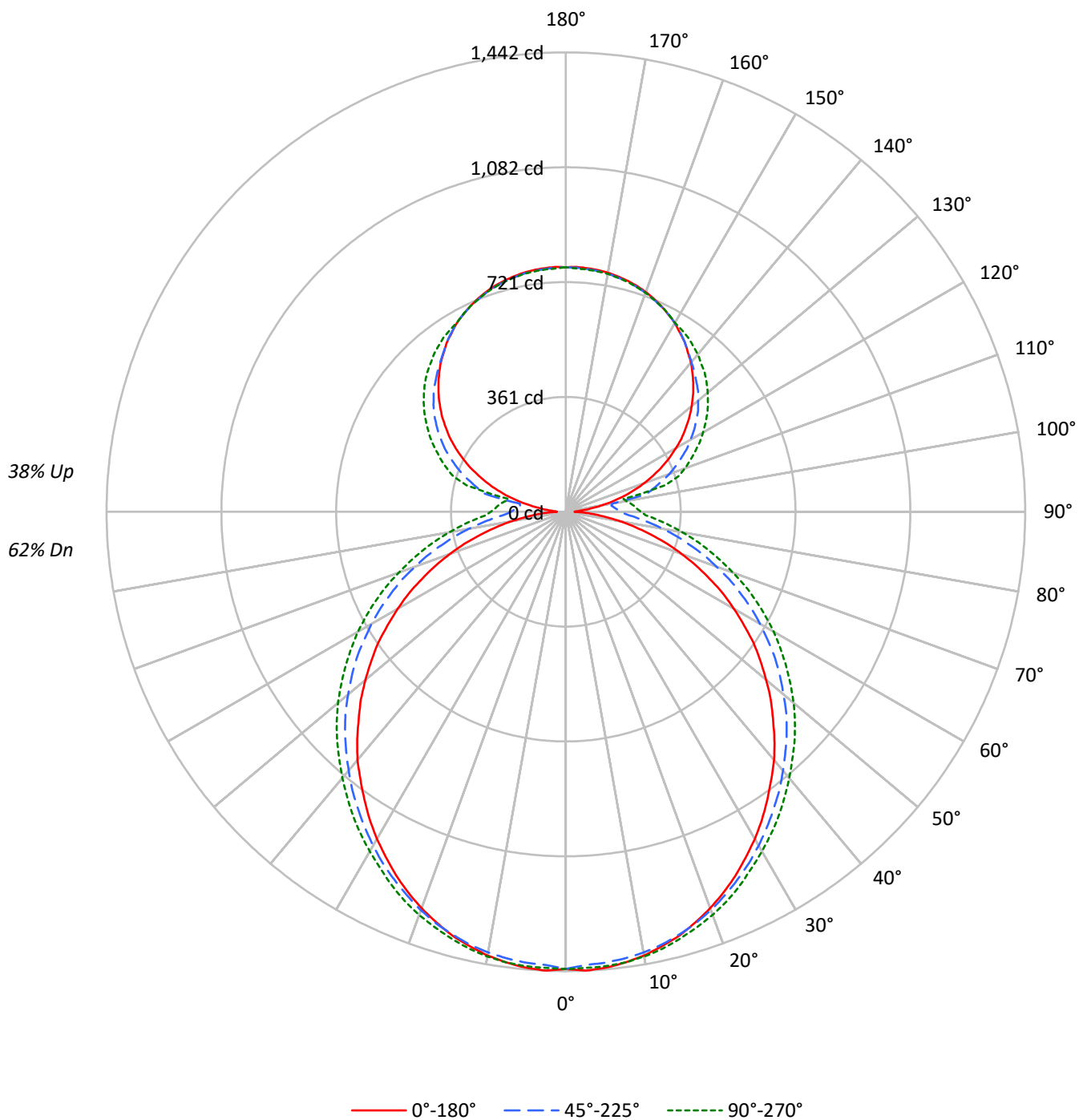
Lumens per Lamp: N/A
Luminaire Lumens: 7270.0 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	67	67	62
1	99	94	90	86	93	88	84	81	77	74	72	67	65	63	58	56	54	54	54	50
2	90	82	75	69	84	77	71	65	67	62	58	58	55	51	50	47	45	45	45	41
3	82	71	63	57	76	67	60	54	59	53	48	51	47	43	44	40	38	38	38	34
4	75	63	54	48	69	59	51	46	52	46	41	45	40	36	39	35	32	32	32	29
5	68	56	47	41	64	53	45	39	46	40	35	40	35	31	35	31	28	28	28	25
6	63	50	41	35	59	47	39	34	42	35	30	36	31	27	32	27	24	24	24	21
7	58	45	37	31	54	43	35	29	38	31	27	33	28	24	29	25	21	21	21	19
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19	19	19	17
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17	17	17	15
10	47	34	27	22	44	33	26	21	29	23	19	26	21	17	23	18	16	16	16	14

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	5.4
20°-30°	589.1	8.1
30°-40°	712.7	9.8
40°-50°	753.4	10.4
50°-60°	709.1	9.8
60°-70°	588.4	8.1
70°-80°	412.9	5.7
80°-90°	234.4	3.2
90°-100°	164.1	2.3
100°-110°	270.4	3.7
110°-120°	389.3	5.4
120°-130°	445.6	6.1
130°-140°	452.0	6.2
140°-150°	410.2	5.6
150°-160°	328.2	4.5
160°-170°	211.6	2.9
170°-180°	72.9	1.0
0°-30°	1114.7	15.3
0°-40°	1827.4	25.1
0°-60°	3289.9	45.3
0°-90°	4525.6	62.3
90°-120°	823.9	11.3
90°-150°	2131.7	29.3
90°-180°	2744.0	37.7
0°-180°	7270.0	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	19
95°	52	86	152	199	214	56
105°	187	223	285	330	323	197
115°	332	348	399	436	447	328
125°	460	461	500	532	542	411
135°	566	565	579	606	616	437
145°	650	650	650	661	668	407
155°	711	712	710	712	711	328
165°	750	748	748	752	747	212
175°	768	764	765	770	763	73
180°	768	768	768	768	768	

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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°	32.7	87.9	161.6	210.0	222.8
95°	52.5	86.0	152.4	199.3	214.4
97.5°	79.6	138.8	144.4	189.1	204.1
100°	111.9	164.0	147.4	181.0	192.9
102.5°	149.8	191.9	259.9	172.6	185.4
105°	187.3	222.9	285.2	330.5	322.7
107.5°	224.6	253.7	313.9	357.0	370.6
110°	260.9	285.2	344.8	383.0	397.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	296.0	318.7	373.0	407.7	422.9
115°	332.3	348.5	399.3	435.9	447.1
117.5°	366.2	378.2	428.1	461.2	474.1
120°	399.0	406.2	452.2	485.5	497.2
122.5°	431.2	432.3	476.9	509.6	519.7
125°	460.0	460.7	499.7	532.0	542.2
127.5°	489.3	488.2	523.3	551.6	562.3
130°	515.8	514.8	542.2	571.8	581.4
132.5°	541.6	541.2	562.8	590.7	599.8
135°	565.9	565.3	578.9	605.8	616.5
137.5°	588.9	587.3	596.5	621.8	629.3
140°	611.2	610.8	613.5	636.2	644.7
142.5°	629.7	632.0	631.0	649.9	656.3
145°	650.4	650.5	650.5	660.7	668.4
147.5°	666.5	668.3	667.8	669.9	676.9
150°	684.3	685.0	684.4	684.4	685.0
152.5°	697.6	699.3	698.2	699.3	698.8
155°	711.4	712.0	710.2	712.5	710.8
157.5°	723.5	723.5	721.2	724.0	721.2
160°	733.8	732.1	731.5	734.9	731.5
162.5°	743.0	740.7	740.1	743.5	739.5
165°	750.4	747.6	747.6	752.2	747.0
167.5°	756.8	753.9	753.3	758.5	752.7
170°	761.9	758.5	759.0	763.6	757.9
172.5°	765.4	761.9	762.5	767.1	760.8
175°	767.7	764.2	764.8	770.0	763.1
177.5°	769.4	765.4	766.5	771.1	764.2
180°	767.7	767.7	767.7	767.7	767.7

(END OF REPORT)