

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: P1000657

Luminaire Tested: SA4XXDIP-B1020D365UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000657
REPORT IS A COMBINATION OF REPORTS P995270 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D365UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

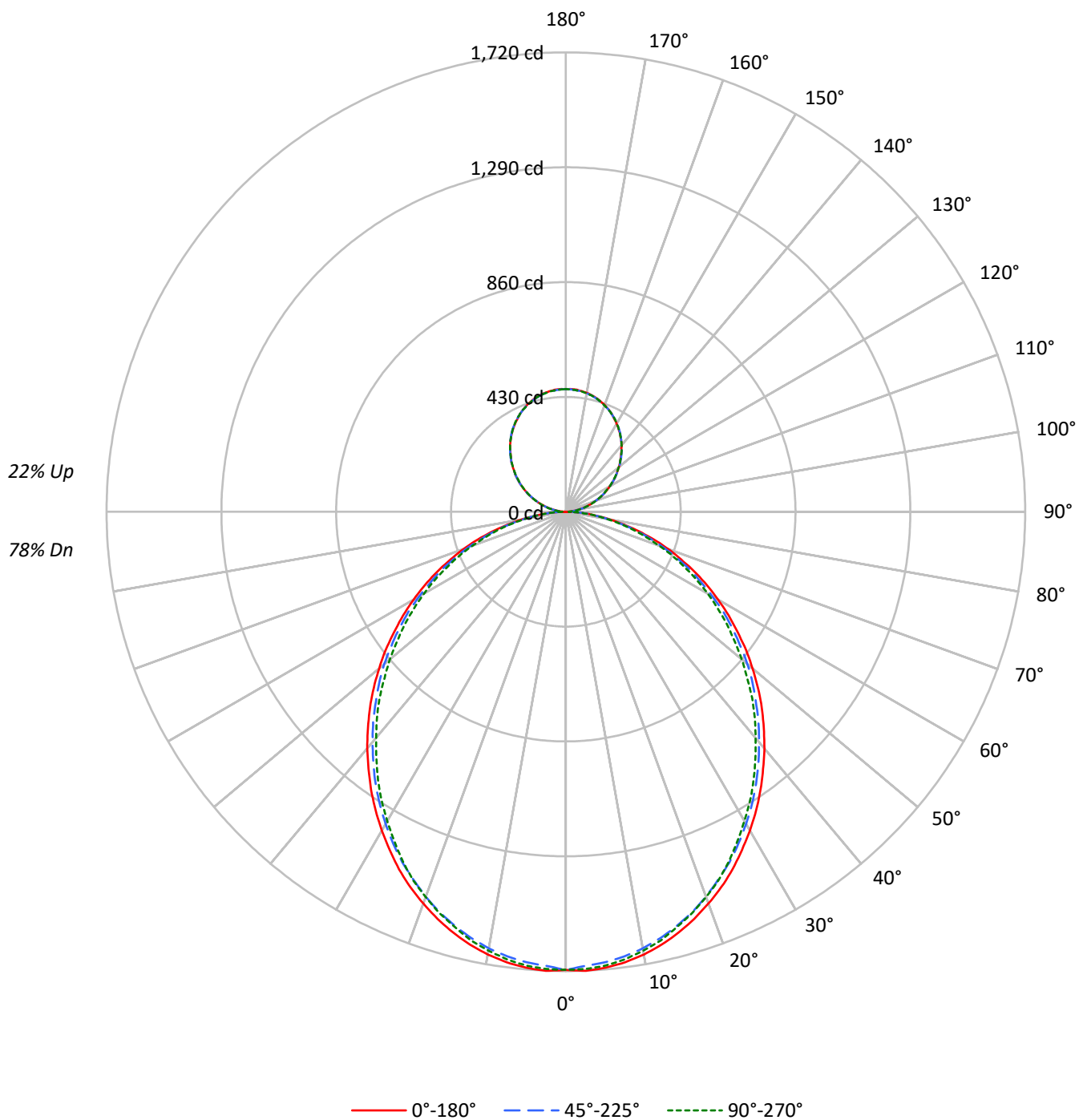
Lumens per Lamp: N/A
Luminaire Lumens: 5678.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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

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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	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	70	69
2	95	87	80	75	90	83	77	72	76	71	67	69	66	62	63	60	58
3	86	76	69	62	82	73	66	61	67	61	57	61	57	53	56	52	49
4	79	68	59	53	75	65	57	51	60	53	48	55	50	45	50	46	42
5	73	61	52	46	69	58	50	44	54	47	42	49	44	39	45	41	37
6	67	54	46	40	64	52	45	39	48	42	37	45	39	35	41	36	33
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29
8	58	45	37	31	55	43	36	31	40	34	29	37	32	28	35	30	26
9	54	41	33	28	52	40	32	27	37	31	26	34	29	25	32	27	24
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13985	13985	13985
5°	13997	13583	13599
10°	13878	13206	13113
15°	13679	12758	12565
20°	13425	12272	11997
25°	13139	11760	11386
30°	12794	11206	10715
35°	12437	10639	10067
40°	12064	10029	9377
45°	11673	9416	8733
50°	11241	8824	8018
55°	10771	8130	7309
60°	10291	7371	6570
65°	9739	6587	5738
70°	9105	5643	4845
75°	8158	4550	3881
80°	6951	3290	2729
85°	5399	1832	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	2.8
10°-20°	455.4	8.0
20°-30°	670.3	11.8
30°-40°	779.1	13.7
40°-50°	779.0	13.7
50°-60°	681.4	12.0
60°-70°	505.9	8.9
70°-80°	287.0	5.1
80°-90°	83.2	1.5
90°-100°	30.0	0.5
100°-110°	89.7	1.6
110°-120°	152.4	2.7
120°-130°	201.0	3.5
130°-140°	225.8	4.0
140°-150°	221.9	3.9
150°-160°	186.6	3.3
160°-170°	124.2	2.2
170°-180°	43.5	0.8
0°-30°	1287.3	22.7
0°-40°	2066.5	36.4
0°-60°	3526.9	62.1
0°-90°	4403.0	77.5
90°-120°	272.1	4.8
90°-150°	920.8	16.2
90°-180°	1275.0	22.5
0°-180°	5678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1715	1715	1715	1715	1715	
5°	1714	1708	1693	1708	1705	163
15°	1631	1626	1605	1613	1609	460
25°	1477	1468	1448	1450	1444	680
35°	1271	1262	1242	1233	1226	795
45°	1038	1028	1006	991	987	800
55°	785	781	761	745	737	703
65°	532	525	511	498	491	526
75°	283	276	269	264	262	300
85°	74	74	72	72	70	80
90°	1	5	8	10	11	6
95°	21	24	27	28	28	23
105°	83	83	85	86	87	88
115°	155	155	154	154	154	153
125°	226	226	225	225	224	201
135°	291	293	293	292	291	225
145°	354	355	355	355	354	221
155°	405	405	405	406	405	186
165°	441	440	439	441	440	124
175°	459	457	457	459	457	44
180°	460	460	460	460	460	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.0	1715.0	1715.0	1715.0	1715.0
2.5°	1720.5	1716.4	1701.3	1715.0	1713.7
5°	1713.7	1708.2	1693.1	1708.2	1705.4
7.5°	1701.3	1695.8	1679.3	1691.7	1690.3
10°	1683.4	1677.9	1660.1	1671.1	1668.3
12.5°	1660.1	1654.6	1635.3	1647.7	1643.6
15°	1631.2	1625.7	1605.1	1613.4	1609.2
17.5°	1598.2	1591.4	1572.1	1577.6	1574.9
20°	1561.1	1554.3	1533.6	1537.8	1535.0
22.5°	1521.3	1511.7	1491.0	1499.3	1493.8
25°	1477.3	1467.7	1448.4	1449.8	1444.3
27.5°	1427.8	1418.2	1400.3	1397.6	1390.7
30°	1378.4	1367.4	1349.5	1344.0	1337.1
32.5°	1326.1	1316.5	1297.3	1290.4	1283.5
35°	1271.2	1261.5	1242.3	1232.7	1225.8
37.5°	1213.5	1205.2	1184.6	1175.0	1165.4
40°	1157.1	1146.1	1125.5	1111.8	1104.9
42.5°	1096.6	1091.1	1067.8	1051.3	1047.2
45°	1037.5	1027.9	1005.9	990.8	986.7
47.5°	975.7	968.8	948.2	931.7	920.7
50°	912.5	907.0	887.8	868.5	860.3
52.5°	850.7	843.8	823.2	806.7	795.7
55°	784.7	780.6	761.3	744.8	736.6
57.5°	722.8	718.7	699.5	683.0	674.7
60°	658.3	651.4	633.5	621.2	614.3
62.5°	595.0	589.5	570.3	559.3	552.4
65°	531.8	525.0	511.2	497.5	490.6
67.5°	467.2	461.7	448.0	434.3	432.9
70°	408.1	398.5	387.5	376.5	372.4
72.5°	344.9	335.3	327.1	318.8	314.7
75°	283.1	276.2	269.4	263.9	262.5
77.5°	222.6	219.9	213.0	211.6	207.5
80°	169.0	164.9	162.2	159.4	158.0
82.5°	116.8	115.4	115.4	114.1	112.7
85°	74.2	74.2	71.5	71.5	70.1
87.5°	35.7	34.4	33.0	33.0	33.0
90°	1.1	5.0	7.8	10.0	10.7
92.5°	9.2	13.9	15.6	16.7	17.1
95°	21.3	24.5	27.0	28.1	28.1
97.5°	34.1	37.0	39.8	41.2	41.2
100°	49.8	51.2	54.4	55.1	55.1
102.5°	66.1	66.5	69.3	70.4	70.7
105°	82.8	83.2	84.6	85.7	86.7
107.5°	100.2	100.6	100.9	102.4	102.0
110°	118.0	118.7	118.3	117.6	118.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	136.5	136.5	135.8	135.8	135.8
115°	155.0	155.0	154.2	153.9	153.5
117.5°	172.4	172.4	172.0	170.9	169.9
120°	189.8	191.2	190.1	188.4	189.1
122.5°	207.9	208.3	207.9	206.8	205.1
125°	225.7	225.7	225.3	224.6	223.9
127.5°	241.7	242.7	242.0	241.3	241.0
130°	258.7	259.8	259.8	259.1	257.7
132.5°	276.1	276.9	276.5	275.8	275.4
135°	291.1	293.2	293.2	292.5	291.4
137.5°	307.8	308.8	309.5	308.5	308.8
140°	324.5	325.2	325.2	324.8	324.5
142.5°	339.8	340.5	340.1	340.1	340.1
145°	353.6	355.0	355.4	355.0	354.0
147.5°	367.8	369.6	369.3	368.9	368.5
150°	380.6	382.1	382.1	382.1	381.7
152.5°	392.7	393.4	393.8	394.8	393.8
155°	405.2	405.2	404.8	406.2	404.8
157.5°	415.8	415.1	415.1	416.2	415.1
160°	425.1	424.7	424.3	425.4	423.6
162.5°	433.6	432.5	432.2	434.3	432.5
165°	441.0	440.0	439.3	441.4	440.0
167.5°	447.1	445.7	445.7	447.8	445.7
170°	452.1	450.3	450.6	452.8	450.3
172.5°	455.6	454.2	454.2	456.7	454.2
175°	458.8	457.0	456.7	459.2	456.7
177.5°	460.2	458.5	458.5	460.9	458.1
180°	459.5	459.5	459.5	459.5	459.5

(END OF REPORT)