

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: P1000637

Luminaire Tested: SA4XXDIP-B1020D365UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000637
REPORT IS A COMBINATION OF REPORTS P995247 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D365UB27-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

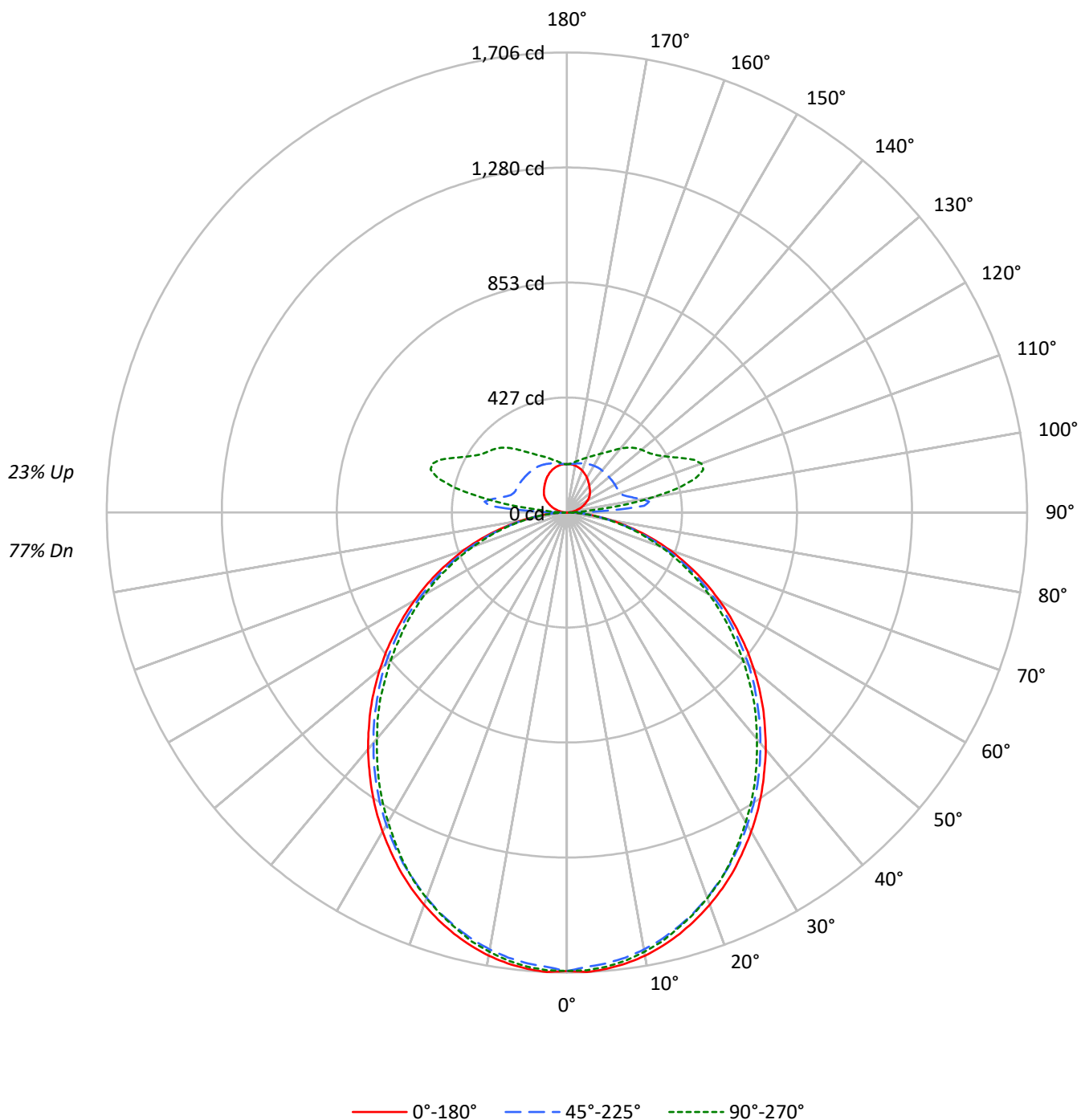
Lumens per Lamp: N/A
Luminaire Lumens: 5674.6 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1000637

CATALOG NUMBER: SA4XXDIP-B1020D365UB27-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1000637

CATALOG NUMBER: SA4XXDIP-B1020D365UB27-4F0-XX-W2A-F4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77		
1	104	99	95	91	99	95	91	88	86	83	81	79	76	74	71	70	68	65		
2	95	87	80	75	90	83	77	72	76	71	67	69	65	62	63	60	57	54		
3	86	76	69	62	82	73	66	60	67	61	56	61	56	53	56	52	49	46		
4	79	68	59	53	75	65	57	51	59	53	48	54	49	45	50	46	42	39		
5	73	60	52	46	69	58	50	44	53	47	42	49	44	39	45	40	37	34		
6	67	54	46	40	64	52	44	39	48	42	37	44	39	35	41	36	32	30		
7	62	49	41	35	59	47	40	34	44	37	32	40	35	31	37	33	29	27		
8	58	45	37	31	55	43	36	30	40	34	29	37	32	27	34	30	26	24		
9	54	41	33	28	51	40	32	27	37	31	26	34	29	25	32	27	23	21		
10	51	38	30	25	48	37	30	25	34	28	24	32	26	22	29	25	21	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

TEST NUMBER: P1000637

CATALOG NUMBER: SA4XXDIP-B1020D365UB27-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	2.8
10°-20°	451.5	8.0
20°-30°	664.5	11.7
30°-40°	772.4	13.6
40°-50°	772.3	13.6
50°-60°	675.5	11.9
60°-70°	501.5	8.8
70°-80°	284.5	5.0
80°-90°	82.2	1.4
90°-100°	133.3	2.3
100°-110°	271.2	4.8
110°-120°	241.7	4.3
120°-130°	203.0	3.6
130°-140°	169.4	3.0
140°-150°	129.4	2.3
150°-160°	91.0	1.6
160°-170°	53.5	0.9
170°-180°	17.4	0.3
0°-30°	1276.2	22.5
0°-40°	2048.6	36.1
0°-60°	3496.5	61.6
0°-90°	4364.7	76.9
90°-120°	646.2	11.4
90°-150°	1148.1	20.2
90°-180°	1310.0	23.1
0°-180°	5674.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
90°	0	3	6	7	7	6
95°	12	37	287	142	86	13
105°	41	60	231	498	496	44
115°	73	91	206	396	476	72
125°	101	120	205	337	380	90
135°	120	143	204	299	340	93
145°	139	159	202	252	278	87
155°	158	170	197	223	232	73
165°	172	177	189	200	203	49
175°	179	180	181	183	183	17
180°	180	180	180	180	180	

TEST NUMBER: P1000637

CATALOG NUMBER: SA4XXDIP-B1020D365UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
90°	0.4	2.8	6.3	7.1	7.4
92.5°	4.9	27.2	138.2	45.7	32.1
95°	11.6	36.7	287.4	142.3	86.0
97.5°	19.4	40.6	307.5	290.6	206.6
100°	26.8	45.8	283.5	402.0	323.4
102.5°	33.9	52.2	253.5	471.8	424.9
105°	41.3	59.8	231.3	498.1	496.2
107.5°	49.4	67.5	216.9	490.2	530.0
110°	57.5	75.2	210.2	462.0	530.7



TEST NUMBER: P1000637

CATALOG NUMBER: SA4XXDIP-B1020D365UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.2	83.0	207.0	427.4	509.9
115°	72.6	91.2	206.3	396.4	476.4
117.5°	80.4	98.8	205.9	372.0	443.6
120°	88.2	106.2	205.9	355.6	416.8
122.5°	95.2	113.4	205.6	344.9	395.7
125°	101.2	120.2	205.2	337.3	380.1
127.5°	106.8	126.6	204.5	330.0	370.3
130°	111.4	132.8	204.2	321.5	361.8
132.5°	116.0	138.0	203.8	311.2	352.3
135°	120.2	143.2	203.5	299.4	339.9
137.5°	124.5	147.6	203.5	286.7	325.5
140°	129.1	151.6	203.1	274.4	309.6
142.5°	134.0	155.4	203.1	262.9	292.7
145°	138.6	158.7	202.4	252.5	277.5
147.5°	143.9	161.9	201.4	243.8	263.4
150°	148.8	164.8	200.3	235.9	251.8
152.5°	153.4	167.7	198.5	229.2	241.2
155°	157.6	170.2	196.8	222.9	232.4
157.5°	161.9	172.4	195.0	216.8	224.3
160°	165.7	174.4	192.9	210.9	216.9
162.5°	169.3	176.0	190.8	205.0	209.8
165°	171.7	177.0	188.7	199.8	202.8
167.5°	174.6	177.9	186.5	195.2	197.1
170°	176.3	178.6	184.4	190.6	191.8
172.5°	178.1	179.2	182.3	186.6	186.5
175°	179.1	179.5	180.9	183.4	182.7
177.5°	179.8	179.5	179.8	181.1	179.8
180°	179.5	179.5	179.5	179.5	179.5

(END OF REPORT)