

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: P1025994

Luminaire Tested: S124RDIP-B1020D365UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025994
REPORT IS A COMBINATION OF REPORTS P998904 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D365UB27-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

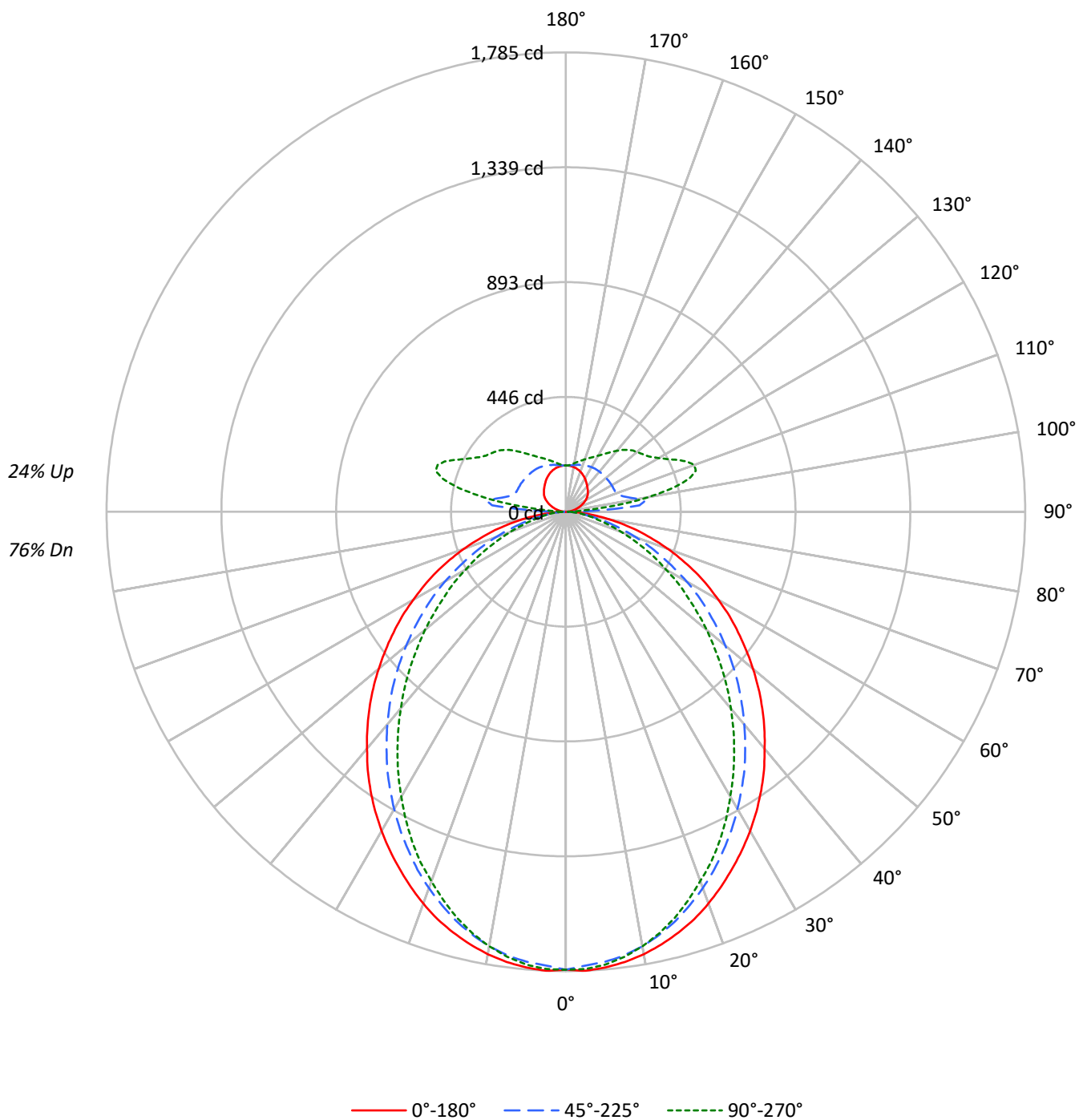
Lumens per Lamp: N/A
Luminaire Lumens: 5422.6 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1025994

CATALOG NUMBER: S124RDIP-B1020D365UB27-4F0-XX-W2A-F4

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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80
1	104	100	96	92	99	95	92	89	86	84	81	79	77	75	71	70	68
2	95	88	81	76	90	84	78	73	76	72	68	70	66	63	63	61	58
3	87	77	70	64	83	74	67	62	68	62	58	62	57	54	56	53	50
4	80	69	61	55	76	66	59	53	60	54	50	55	50	46	51	47	43
5	74	62	53	47	70	59	52	46	54	48	43	50	45	41	46	42	38
6	68	56	47	41	65	53	46	40	49	43	38	45	40	36	42	37	34
7	63	50	42	37	60	49	41	36	45	38	34	41	36	32	38	34	30
8	59	46	38	33	56	44	37	32	41	35	30	38	33	29	35	31	27
9	55	42	35	29	52	41	34	29	38	32	27	35	30	26	33	28	25
10	51	39	32	27	49	38	31	26	35	29	25	33	27	24	30	26	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

TEST NUMBER: P1025994

CATALOG NUMBER: S124RDIP-B1020D365UB27-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	3.1
10°-20°	466.6	8.6
20°-30°	673.6	12.4
30°-40°	763.5	14.1
40°-50°	737.1	13.6
50°-60°	612.8	11.3
60°-70°	423.0	7.8
70°-80°	213.7	3.9
80°-90°	55.0	1.0
90°-100°	133.3	2.5
100°-110°	271.2	5.0
110°-120°	241.7	4.5
120°-130°	203.0	3.7
130°-140°	169.4	3.1
140°-150°	129.4	2.4
150°-160°	91.0	1.7
160°-170°	53.5	1.0
170°-180°	17.4	0.3
0°-30°	1307.6	24.1
0°-40°	2071.0	38.2
0°-60°	3421.0	63.1
0°-90°	4112.7	75.8
90°-120°	646.2	11.9
90°-150°	1148.1	21.2
90°-180°	1310.0	24.2
0°-180°	5422.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	0	3	6	7	7	5
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: P1025994

CATALOG NUMBER: S124RDIP-B1020D365UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
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: P1025994

CATALOG NUMBER: S124RDIP-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)