

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: P1026053

Luminaire Tested: S124RDIP-B1020D810UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026053
REPORT IS A COMBINATION OF REPORTS P998983 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB27-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

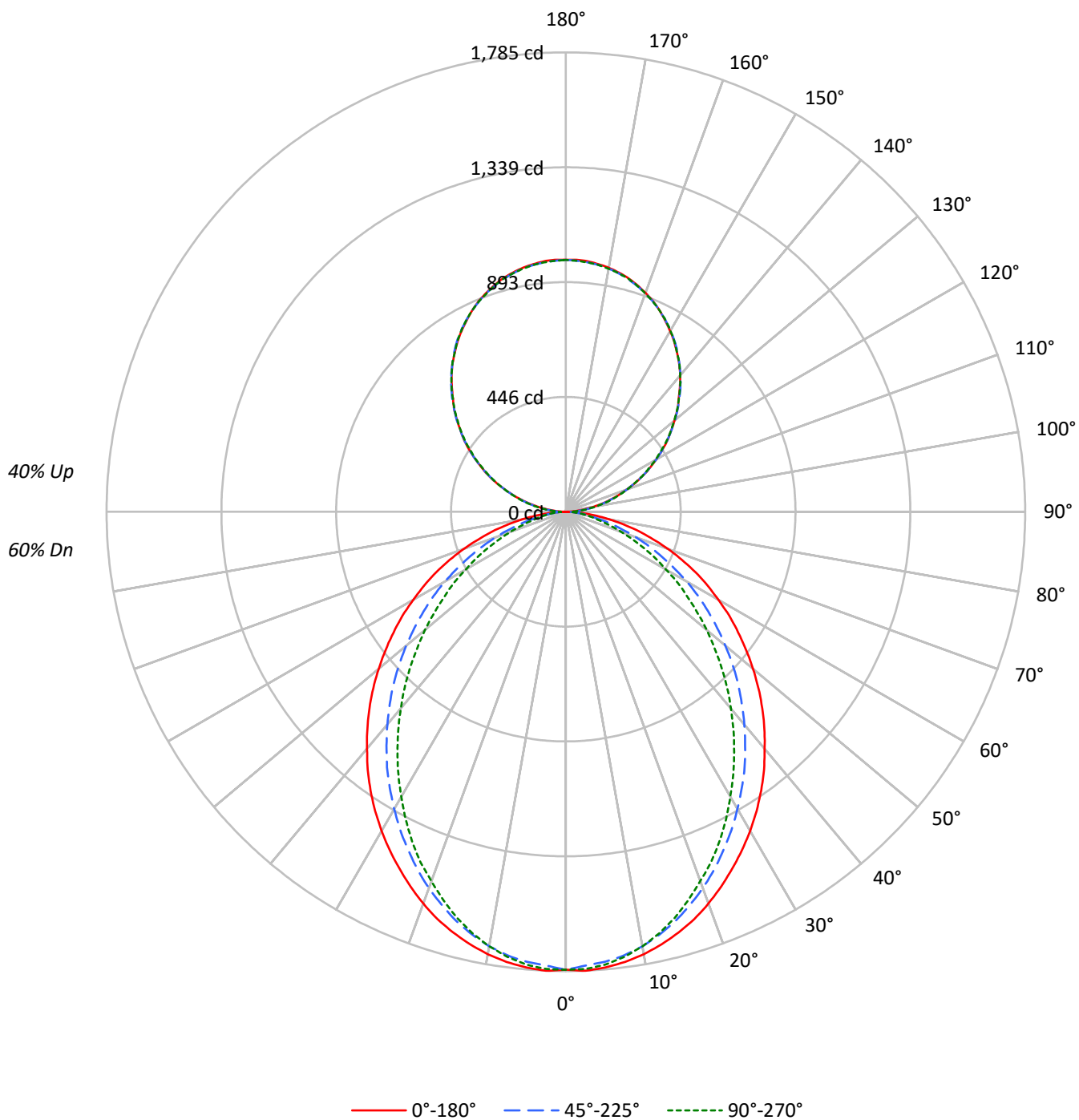
Lumens per Lamp: N/A
Luminaire Lumens: 6830.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 67.9
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	66	65	58	57	56
2	92	84	78	73	85	79	74	69	69	65	62	60	57	55	52	50	48
3	84	74	67	61	78	70	63	58	61	56	52	54	50	46	46	43	41
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	41	38	36
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31
6	65	53	45	39	61	50	43	38	44	39	34	39	34	31	34	30	28
7	60	48	40	35	56	45	38	33	40	35	30	36	31	27	31	27	25
8	56	44	36	31	53	41	34	29	37	31	27	33	28	25	29	25	22
9	52	40	33	28	49	38	31	26	34	28	24	30	26	22	27	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	2.5
10°-20°	466.6	6.8
20°-30°	673.6	9.9
30°-40°	763.5	11.2
40°-50°	737.1	10.8
50°-60°	612.8	9.0
60°-70°	423.0	6.2
70°-80°	213.7	3.1
80°-90°	56.4	0.8
90°-100°	63.8	0.9
100°-110°	191.1	2.8
110°-120°	324.7	4.8
120°-130°	428.2	6.3
130°-140°	480.9	7.0
140°-150°	472.7	6.9
150°-160°	397.5	5.8
160°-170°	264.5	3.9
170°-180°	92.6	1.4
0°-30°	1307.6	19.1
0°-40°	2071.0	30.3
0°-60°	3421.0	50.1
0°-90°	4114.1	60.2
90°-120°	579.5	8.5
90°-150°	1961.2	28.7
90°-180°	2716.0	39.8
0°-180°	6830.0	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°	2	11	17	21	23	8
95°	45	52	58	60	60	49
105°	176	177	180	182	185	187
115°	330	330	328	328	327	326
125°	481	481	480	478	477	429
135°	620	624	624	623	621	480
145°	753	756	757	756	754	471
155°	863	863	862	865	862	397
165°	940	937	936	940	937	265
175°	977	974	973	978	973	93
180°	979	979	979	979	979	

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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°	2.3	10.6	16.7	21.2	22.7
92.5°	19.7	29.5	33.3	35.6	36.3
95°	45.4	52.2	57.5	59.8	59.8
97.5°	72.7	78.7	84.8	87.8	87.8
100°	106.0	109.0	115.8	117.3	117.3
102.5°	140.8	141.6	147.6	149.9	150.6
105°	176.4	177.1	180.2	182.4	184.7
107.5°	213.5	214.2	215.0	218.0	217.3
110°	251.3	252.8	252.1	250.6	252.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.7	290.7	289.2	289.2	289.2
115°	330.1	330.1	328.5	327.8	327.0
117.5°	367.2	367.2	366.4	364.1	361.9
120°	404.3	407.3	405.0	401.2	402.7
122.5°	442.9	443.6	442.9	440.6	436.8
125°	480.7	480.7	480.0	478.4	476.9
127.5°	514.8	517.0	515.5	514.0	513.3
130°	551.1	553.4	553.4	551.9	548.8
132.5°	588.2	589.7	589.0	587.5	586.7
135°	620.0	624.5	624.5	623.0	620.8
137.5°	655.6	657.9	659.4	657.1	657.9
140°	691.2	692.7	692.7	691.9	691.2
142.5°	723.7	725.2	724.5	724.5	724.5
145°	753.2	756.3	757.0	756.3	754.0
147.5°	783.5	787.3	786.6	785.8	785.0
150°	810.8	813.8	813.8	813.8	813.0
152.5°	836.5	838.0	838.8	841.1	838.8
155°	863.0	863.0	862.3	865.3	862.3
157.5°	885.7	884.2	884.2	886.5	884.2
160°	905.4	904.6	903.9	906.2	902.4
162.5°	923.6	921.3	920.5	925.1	921.3
165°	939.5	937.2	935.7	940.2	937.2
167.5°	952.3	949.3	949.3	953.9	949.3
170°	962.9	959.2	959.9	964.5	959.2
172.5°	970.5	967.5	967.5	972.8	967.5
175°	977.3	973.5	972.8	978.1	972.8
177.5°	980.3	976.6	976.6	981.9	975.8
180°	978.8	978.8	978.8	978.8	978.8

(END OF REPORT)