

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: P1025018

Luminaire Tested: S124DIP-B1020D810UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025018
REPORT IS A COMBINATION OF REPORTS P995408 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D810UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

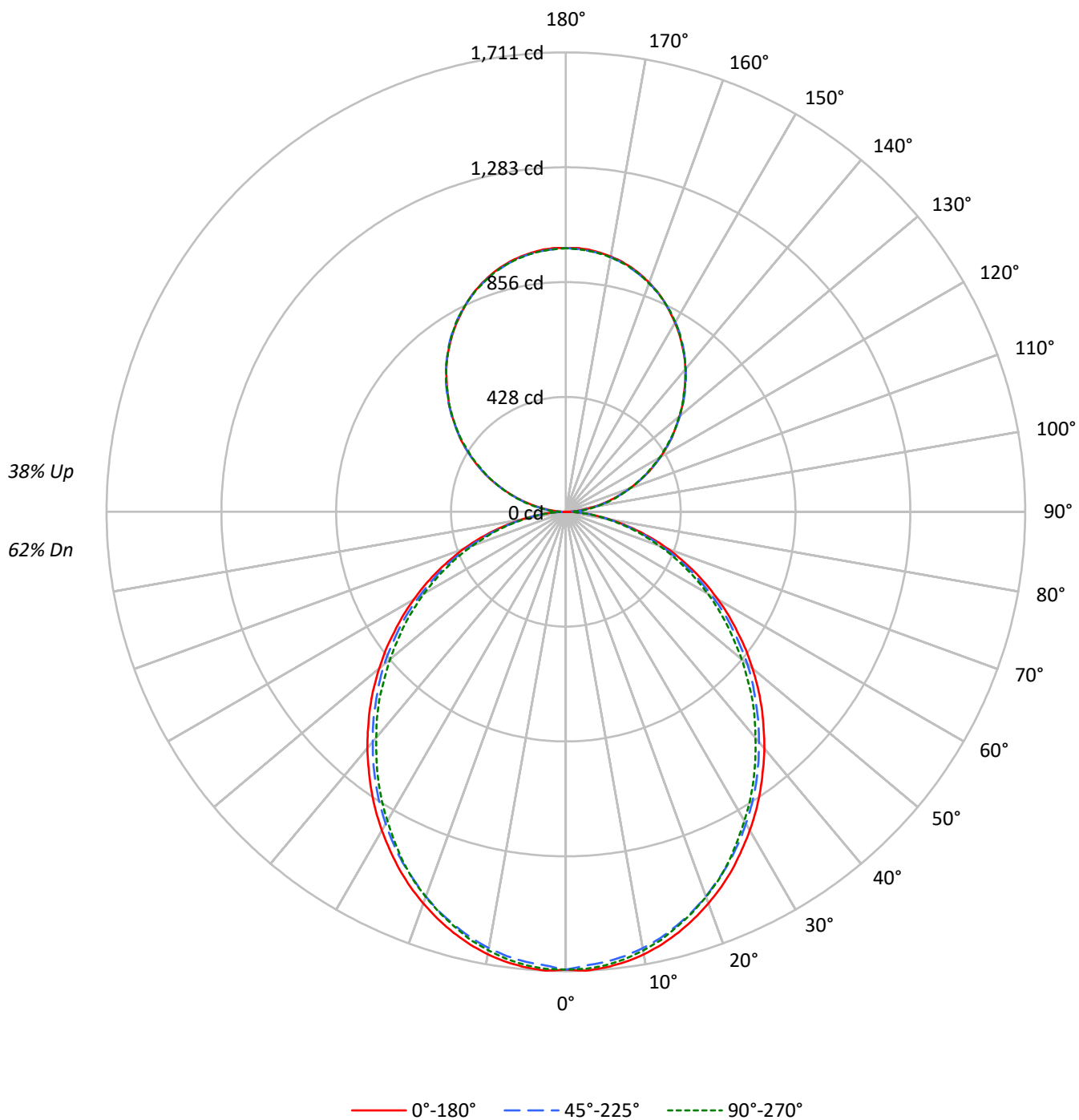
Lumens per Lamp: N/A
Luminaire Lumens: 7103.0 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	86	83	79	76	74	68	67	65	59	58	56
2	91	84	77	72	85	79	73	68	69	65	61	60	57	54	52	50	47
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	46	43	40
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	41	38	35
5	70	58	50	44	65	55	47	42	49	43	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21
9	52	39	32	27	48	37	30	25	33	27	23	30	25	21	26	22	19
10	48	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13906	13906	13906
5°	13917	13506	13522
10°	13800	13130	13039
15°	13602	12685	12494
20°	13349	12203	11929
25°	13064	11693	11321
30°	12721	11142	10654
35°	12365	10579	10010
40°	11995	9972	9324
45°	11608	9363	8683
50°	11177	8773	7973
55°	10710	8084	7267
60°	10231	7329	6533
65°	9684	6550	5705
70°	9053	5611	4818
75°	8112	4522	3859
80°	6914	3269	2714
85°	5370	1822	1461

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11608 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	2.3
10°-20°	452.8	6.4
20°-30°	666.4	9.4
30°-40°	774.7	10.9
40°-50°	774.6	10.9
50°-60°	677.5	9.5
60°-70°	503.0	7.1
70°-80°	285.4	4.0
80°-90°	83.8	1.2
90°-100°	64.0	0.9
100°-110°	191.7	2.7
110°-120°	325.6	4.6
120°-130°	429.4	6.0
130°-140°	482.3	6.8
140°-150°	474.0	6.7
150°-160°	398.7	5.6
160°-170°	265.3	3.7
170°-180°	92.9	1.3
0°-30°	1280.0	18.0
0°-40°	2054.7	28.9
0°-60°	3506.8	49.4
0°-90°	4379.1	61.7
90°-120°	581.3	8.2
90°-150°	1967.0	27.7
90°-180°	2724.0	38.3
0°-180°	7103.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1704	1698	1683	1698	1696	162
15°	1622	1616	1596	1604	1600	457
25°	1469	1459	1440	1442	1436	676
35°	1264	1254	1235	1226	1219	790
45°	1032	1022	1000	985	981	795
55°	780	776	757	741	732	699
65°	529	522	508	495	488	523
75°	282	275	268	262	261	299
85°	74	74	71	71	70	79
90°	2	11	17	21	23	8
95°	46	52	58	60	60	49
105°	177	178	181	183	185	188
115°	331	331	330	329	328	326
125°	482	482	481	480	478	430
135°	622	626	626	625	623	481
145°	756	758	759	758	756	473
155°	866	866	865	868	865	398
165°	942	940	938	943	940	266
175°	980	976	976	981	976	93
180°	982	982	982	982	982	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.3	1705.3	1705.3	1705.3	1705.3
2.5°	1710.8	1706.7	1691.6	1705.3	1703.9
5°	1703.9	1698.5	1683.4	1698.5	1695.7
7.5°	1691.6	1686.2	1669.8	1682.1	1680.7
10°	1673.9	1668.4	1650.6	1661.6	1658.8
12.5°	1650.6	1645.2	1626.1	1638.4	1634.3
15°	1622.0	1616.5	1596.0	1604.2	1600.1
17.5°	1589.2	1582.3	1563.2	1568.7	1565.9
20°	1552.3	1545.4	1524.9	1529.0	1526.3
22.5°	1512.6	1503.1	1482.6	1490.8	1485.3
25°	1468.9	1459.3	1440.2	1441.6	1436.1
27.5°	1419.7	1410.2	1392.4	1389.7	1382.8
30°	1370.5	1359.6	1341.8	1336.4	1329.5
32.5°	1318.6	1309.0	1289.9	1283.1	1276.2
35°	1263.9	1254.4	1235.3	1225.7	1218.9
37.5°	1206.6	1198.4	1177.9	1168.3	1158.7
40°	1150.5	1139.6	1119.1	1105.4	1098.6
42.5°	1090.4	1084.9	1061.7	1045.3	1041.2
45°	1031.7	1022.1	1000.2	985.2	981.1
47.5°	970.2	963.3	942.8	926.4	915.5
50°	907.3	901.8	882.7	863.6	855.4
52.5°	845.8	839.0	818.5	802.1	791.2
55°	780.2	776.1	757.0	740.6	732.4
57.5°	718.7	714.6	695.5	679.1	670.9
60°	654.5	647.7	629.9	617.6	610.8
62.5°	591.7	586.2	567.1	556.1	549.3
65°	528.8	522.0	508.3	494.6	487.8
67.5°	464.6	459.1	445.5	431.8	430.4
70°	405.8	396.3	385.3	374.4	370.3
72.5°	343.0	333.4	325.2	317.0	312.9
75°	281.5	274.7	267.8	262.4	261.0
77.5°	221.4	218.6	211.8	210.4	206.3
80°	168.1	164.0	161.2	158.5	157.1
82.5°	116.1	114.8	114.8	113.4	112.0
85°	73.8	73.8	71.1	71.1	69.7
87.5°	35.5	34.2	32.8	32.8	32.8
90°	2.3	10.6	16.7	21.3	22.8
92.5°	19.7	29.6	33.4	35.7	36.4
95°	45.6	52.4	57.7	60.0	60.0
97.5°	72.9	79.0	85.0	88.1	88.1
100°	106.3	109.3	116.2	117.7	117.7
102.5°	141.2	142.0	148.1	150.3	151.1
105°	176.9	177.7	180.7	183.0	185.3
107.5°	214.1	214.9	215.6	218.7	217.9
110°	252.1	253.6	252.8	251.3	253.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.6	291.6	290.0	290.0	290.0
115°	331.0	331.0	329.5	328.8	328.0
117.5°	368.2	368.2	367.5	365.2	362.9
120°	405.4	408.5	406.2	402.4	403.9
122.5°	444.2	444.9	444.2	441.9	438.1
125°	482.1	482.1	481.4	479.8	478.3
127.5°	516.3	518.6	517.1	515.5	514.8
130°	552.7	555.0	555.0	553.5	550.5
132.5°	589.9	591.5	590.7	589.2	588.4
135°	621.8	626.4	626.4	624.9	622.6
137.5°	657.5	659.8	661.3	659.0	659.8
140°	693.2	694.7	694.7	694.0	693.2
142.5°	725.8	727.4	726.6	726.6	726.6
145°	755.5	758.5	759.3	758.5	756.2
147.5°	785.8	789.6	788.9	788.1	787.3
150°	813.2	816.2	816.2	816.2	815.4
152.5°	839.0	840.5	841.3	843.5	841.3
155°	865.6	865.6	864.8	867.8	864.8
157.5°	888.3	886.8	886.8	889.1	886.8
160°	908.1	907.3	906.5	908.8	905.0
162.5°	926.3	924.0	923.3	927.8	924.0
165°	942.2	940.0	938.4	943.0	940.0
167.5°	955.1	952.1	952.1	956.7	952.1
170°	965.8	962.0	962.7	967.3	962.0
172.5°	973.4	970.3	970.3	975.6	970.3
175°	980.2	976.4	975.6	981.0	975.6
177.5°	983.2	979.4	979.4	984.8	978.7
180°	981.7	981.7	981.7	981.7	981.7

(END OF REPORT)