

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: P1025028

Luminaire Tested: S124DIP-B1020D810UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025028
REPORT IS A COMBINATION OF REPORTS P995418 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D810UB50-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

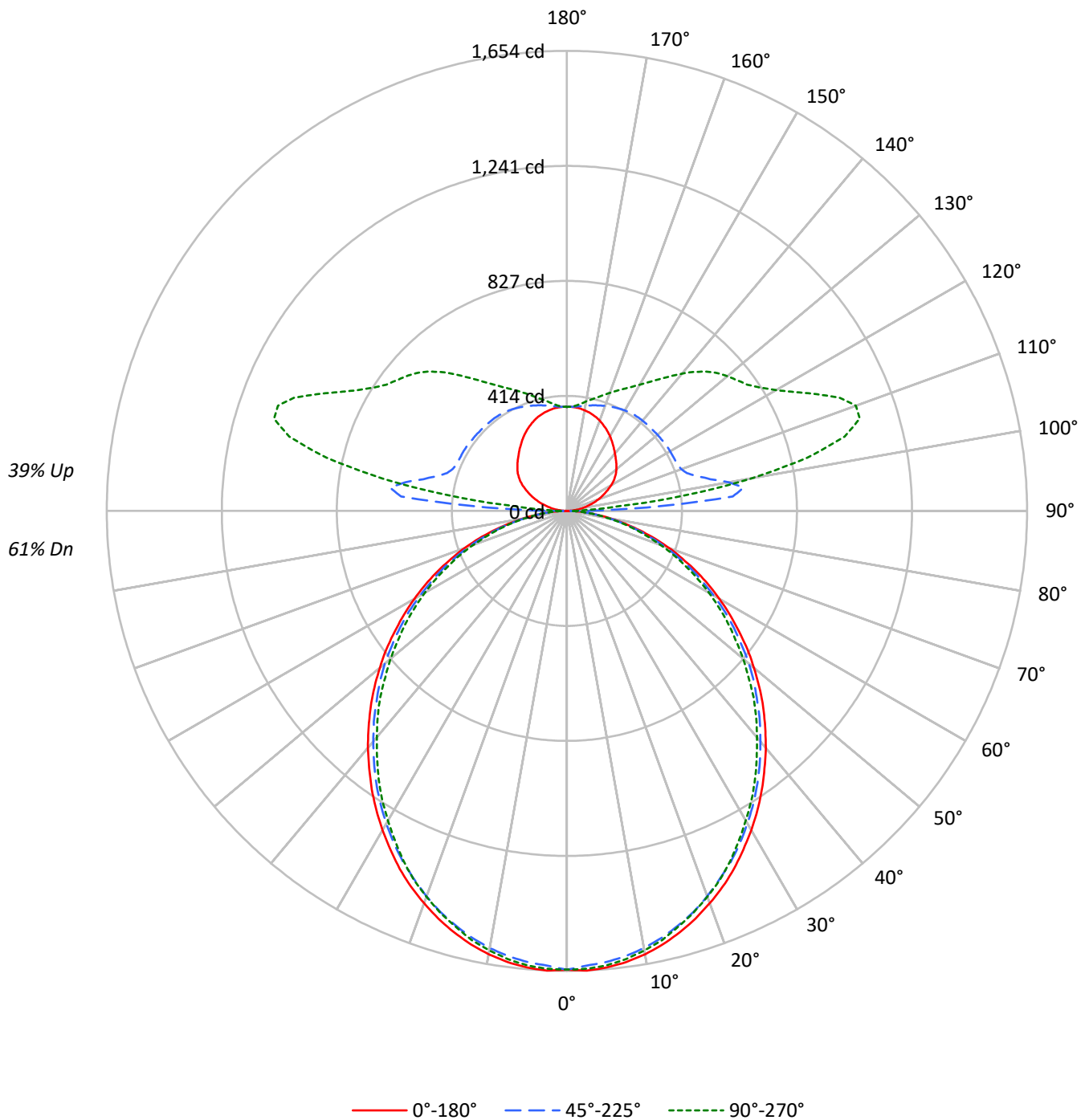
Lumens per Lamp: N/A
Luminaire Lumens: 6962.4 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	89	89	89	77	77	77	66	66	66
1	100	96	92	88	94	90	86	83	78	76	73	68	66	64	58	57	56
2	91	84	77	72	85	78	73	68	69	64	61	60	56	54	51	49	47
3	83	74	66	60	78	69	62	57	61	55	51	53	49	45	45	43	40
4	76	65	57	51	71	61	54	48	54	48	44	47	43	39	41	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	37	33	38	33	30	33	29	26
7	60	47	39	33	56	45	37	32	40	33	29	35	30	26	30	27	24
8	55	43	35	30	52	41	33	28	36	30	26	32	27	23	28	24	21
9	52	39	32	26	48	37	30	25	33	27	23	29	25	21	26	22	19
10	48	36	29	24	45	34	27	23	31	25	21	27	22	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13448	13448	13448
5°	13460	13062	13078
10°	13345	12698	12610
15°	13154	12268	12082
20°	12910	11802	11537
25°	12635	11309	10949
30°	12302	10776	10304
35°	11959	10230	9681
40°	11601	9644	9017
45°	11225	9055	8397
50°	10810	8485	7710
55°	10358	7818	7028
60°	9895	7088	6318
65°	9365	6335	5518
70°	8757	5427	4659
75°	7844	4374	3732
80°	6683	3162	2626
85°	5196	1760	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	2.2
10°-20°	437.9	6.3
20°-30°	644.5	9.3
30°-40°	749.2	10.8
40°-50°	749.1	10.8
50°-60°	655.2	9.4
60°-70°	486.5	7.0
70°-80°	276.0	4.0
80°-90°	80.5	1.2
90°-100°	277.7	4.0
100°-110°	564.7	8.1
110°-120°	503.4	7.2
120°-130°	422.8	6.1
130°-140°	352.9	5.1
140°-150°	269.5	3.9
150°-160°	189.4	2.7
160°-170°	111.4	1.6
170°-180°	36.2	0.5
0°-30°	1237.9	17.8
0°-40°	1987.1	28.5
0°-60°	3391.5	48.7
0°-90°	4234.4	60.8
90°-120°	1345.8	19.3
90°-150°	2390.9	34.3
90°-180°	2728.0	39.2
0°-180°	6962.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1551	1547	442
25°	1421	1411	1393	1394	1389	654
35°	1222	1213	1195	1185	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	511	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	77
90°	1	6	13	15	15	6
95°	24	76	598	296	179	27
105°	86	124	482	1037	1033	92
115°	151	190	430	825	992	150
125°	211	250	427	702	792	188
135°	250	298	424	624	708	194
145°	289	330	422	526	578	181
155°	328	354	410	464	484	151
165°	358	369	393	416	422	101
175°	373	374	377	382	380	35
180°	374	374	374	374	374	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1654.5	1650.5	1636.0	1649.2	1647.9
5°	1647.9	1642.6	1628.1	1642.6	1640.0
7.5°	1636.0	1630.7	1614.8	1626.7	1625.4
10°	1618.8	1613.5	1596.3	1606.9	1604.3
12.5°	1596.3	1591.1	1572.6	1584.5	1580.5
15°	1568.6	1563.3	1543.5	1551.4	1547.4
17.5°	1536.9	1530.3	1511.8	1517.1	1514.4
20°	1501.2	1494.6	1474.8	1478.7	1476.1
22.5°	1462.9	1453.6	1433.8	1441.7	1436.4
25°	1420.6	1411.3	1392.8	1394.2	1388.9
27.5°	1373.0	1363.8	1346.6	1343.9	1337.3
30°	1325.4	1314.9	1297.7	1292.4	1285.8
32.5°	1275.2	1266.0	1247.5	1240.9	1234.3
35°	1222.4	1213.1	1194.6	1185.4	1178.8
37.5°	1166.9	1158.9	1139.1	1129.9	1120.6
40°	1112.7	1102.1	1082.3	1069.1	1062.5
42.5°	1054.5	1049.3	1026.8	1010.9	1007.0
45°	997.7	988.5	967.3	952.8	948.8
47.5°	938.2	931.6	911.8	896.0	885.4
50°	877.5	872.2	853.7	835.2	827.2
52.5°	818.0	811.4	791.6	775.7	765.1
55°	754.6	750.6	732.1	716.2	708.3
57.5°	695.1	691.1	672.6	656.8	648.8
60°	633.0	626.4	609.2	597.3	590.7
62.5°	572.2	566.9	548.4	537.8	531.2
65°	511.4	504.8	491.6	478.4	471.8
67.5°	449.3	444.0	430.8	417.6	416.3
70°	392.5	383.2	372.7	362.1	358.1
72.5°	331.7	322.4	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.4	204.8	203.5	199.5
80°	162.5	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	0.7	5.9	13.2	14.7	15.4
92.5°	10.3	56.6	287.9	95.1	66.8
95°	24.2	76.4	598.5	296.3	179.2
97.5°	40.4	84.4	640.4	605.2	430.4
100°	55.8	95.4	590.5	837.2	673.4
102.5°	70.5	108.7	528.0	982.6	884.9
105°	85.9	124.4	481.8	1037.4	1033.3
107.5°	102.8	140.6	451.7	1020.8	1103.8
110°	119.7	156.8	437.7	962.0	1105.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.9	173.0	431.1	890.1	1061.9
115°	151.3	189.9	429.6	825.4	992.2
117.5°	167.4	205.6	428.9	774.8	923.9
120°	183.6	221.0	428.9	740.7	868.1
122.5°	198.3	236.1	428.2	718.2	824.0
125°	210.8	250.4	427.4	702.4	791.7
127.5°	222.5	263.6	425.9	687.4	771.1
130°	232.1	276.5	425.2	669.4	753.5
132.5°	241.6	287.5	424.5	648.1	733.7
135°	250.4	298.2	423.7	623.5	708.0
137.5°	259.2	307.4	423.7	597.1	677.8
140°	268.8	315.8	423.0	571.3	644.8
142.5°	279.1	323.5	423.0	547.4	609.5
145°	288.6	330.5	421.5	525.8	578.0
147.5°	299.6	337.0	419.3	507.8	548.6
150°	309.9	343.4	417.1	491.3	524.4
152.5°	319.5	349.2	413.5	477.4	502.3
155°	328.3	354.4	409.8	464.1	484.0
157.5°	337.1	359.1	406.1	451.6	467.1
160°	345.2	363.2	401.7	439.2	451.7
162.5°	352.5	366.4	397.3	427.0	437.0
165°	357.7	368.7	392.9	416.0	422.3
167.5°	363.5	370.5	388.5	406.5	410.5
170°	367.2	372.0	384.1	396.9	399.5
172.5°	370.9	373.0	379.7	388.5	388.5
175°	373.1	373.8	376.7	381.9	380.4
177.5°	374.5	373.8	374.5	377.1	374.5
180°	373.8	373.8	373.8	373.8	373.8

(END OF REPORT)