

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: P1024857

Luminaire Tested: S124DIP-B1020D1205UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024857
REPORT IS A COMBINATION OF REPORTS P995187 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB27-4F0-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

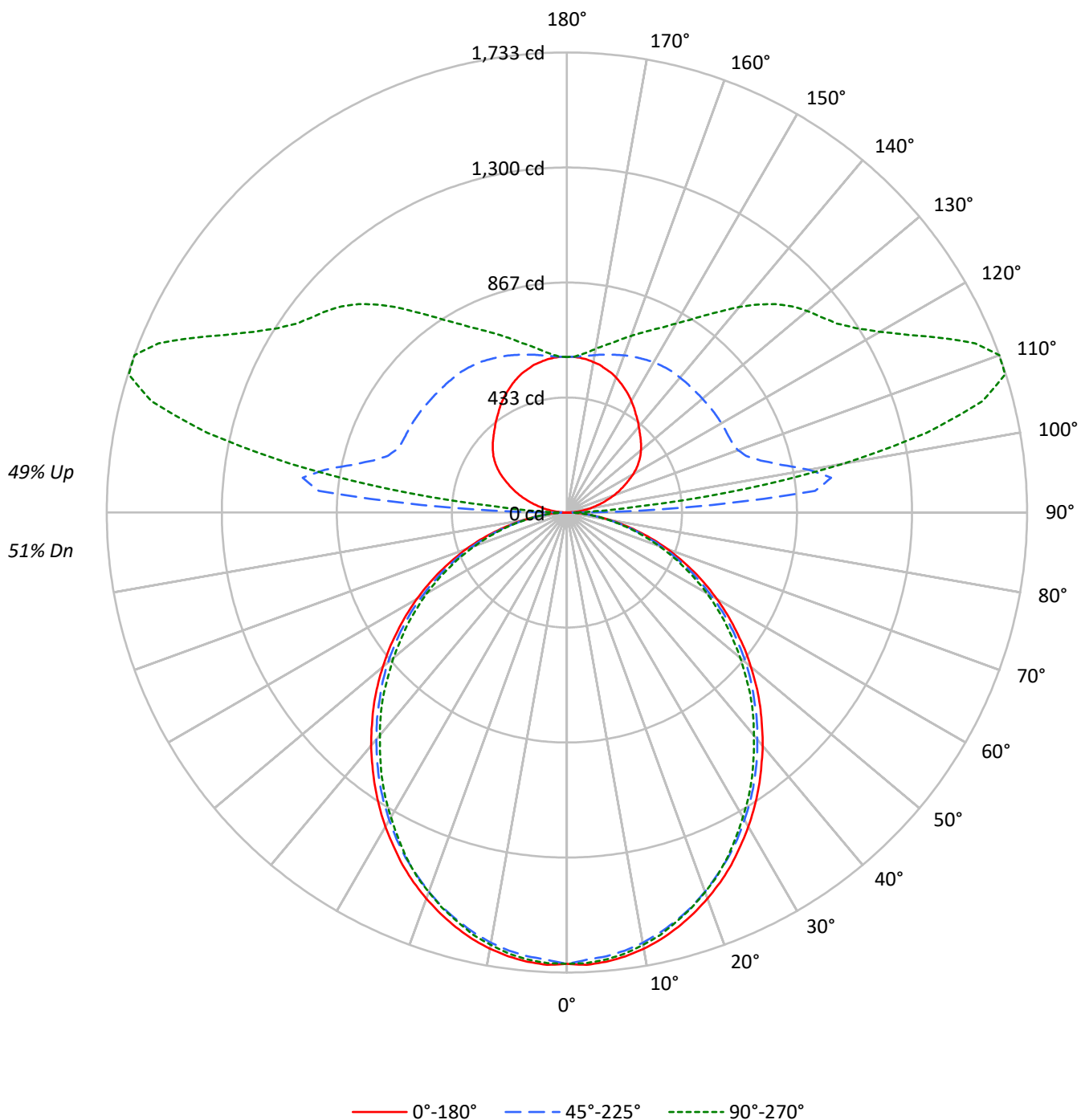
Lumens per Lamp: N/A
Luminaire Lumens: 8642.6 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40
3	81	72	64	59	75	67	60	55	57	52	48	47	44	41	39	36	34
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	29
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	31	28	26
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23
7	58	46	38	32	54	43	36	30	37	31	27	31	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	30	25	46	36	29	24	31	25	21	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	1.9
10°-20°	451.5	5.2
20°-30°	664.5	7.7
30°-40°	772.4	8.9
40°-50°	772.3	8.9
50°-60°	675.5	7.8
60°-70°	501.5	5.8
70°-80°	284.5	3.3
80°-90°	83.7	1.0
90°-100°	435.3	5.0
100°-110°	885.3	10.2
110°-120°	789.1	9.1
120°-130°	662.8	7.7
130°-140°	553.1	6.4
140°-150°	422.4	4.9
150°-160°	296.9	3.4
160°-170°	174.6	2.0
170°-180°	56.8	0.7
0°-30°	1276.2	14.8
0°-40°	2048.6	23.7
0°-60°	3496.5	40.5
0°-90°	4366.3	50.5
90°-120°	2109.6	24.4
90°-150°	3748.0	43.4
90°-180°	4276.0	49.5
0°-180°	8642.6	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°	1	9	21	23	24	7
95°	38	120	938	464	281	42
105°	135	195	755	1626	1620	143
115°	237	298	674	1294	1555	235
125°	330	392	670	1101	1241	294
135°	393	467	664	977	1110	303
145°	452	518	661	824	906	284
155°	515	555	642	728	759	237
165°	561	578	616	652	662	158
175°	585	586	591	599	596	56
180°	586	586	586	586	586	

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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°	1.2	9.2	20.7	23.0	24.2
92.5°	16.1	88.6	451.3	149.1	104.8
95°	38.0	119.7	938.2	464.5	280.9
97.5°	63.3	132.4	1003.8	948.6	674.6
100°	87.5	149.6	925.6	1312.4	1055.6
102.5°	110.5	170.4	827.7	1540.3	1387.2
105°	134.7	195.1	755.2	1626.1	1619.7
107.5°	161.2	220.4	708.0	1600.2	1730.3
110°	187.6	245.8	686.1	1508.1	1732.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	213.0	271.1	675.8	1395.2	1664.6
115°	237.1	297.6	673.5	1294.0	1555.3
117.5°	262.5	322.4	672.3	1214.6	1448.2
120°	287.8	346.5	672.3	1161.0	1360.7
122.5°	310.8	370.2	671.1	1125.8	1291.6
125°	330.4	392.5	670.0	1101.2	1241.0
127.5°	348.8	413.3	667.7	1077.6	1208.8
130°	363.8	433.4	666.5	1049.3	1181.1
132.5°	378.7	450.7	665.4	1015.9	1150.0
135°	392.6	467.4	664.2	977.4	1109.8
137.5°	406.4	481.8	664.2	935.9	1062.6
140°	421.3	495.0	663.1	895.6	1010.8
142.5°	437.5	507.1	663.1	858.2	955.5
145°	452.4	518.0	660.8	824.2	906.0
147.5°	469.7	528.4	657.3	796.0	859.9
150°	485.8	538.2	653.9	770.2	822.0
152.5°	500.8	547.4	648.1	748.2	787.4
155°	514.6	555.4	642.4	727.6	758.6
157.5°	528.4	562.9	636.6	708.0	732.2
160°	541.1	569.2	629.7	688.4	708.0
162.5°	552.6	574.4	622.8	669.4	685.0
165°	560.6	577.9	615.9	652.2	661.9
167.5°	569.8	580.8	609.0	637.2	643.5
170°	575.6	583.1	602.1	622.2	626.3
172.5°	581.4	584.8	595.2	609.0	609.0
175°	584.8	586.0	590.6	598.6	596.3
177.5°	587.1	586.0	587.1	591.2	587.1
180°	586.0	586.0	586.0	586.0	586.0

(END OF REPORT)