

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: P1024969

Luminaire Tested: S124DIP-B1020D590UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024969
REPORT IS A COMBINATION OF REPORTS P995344 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D590UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

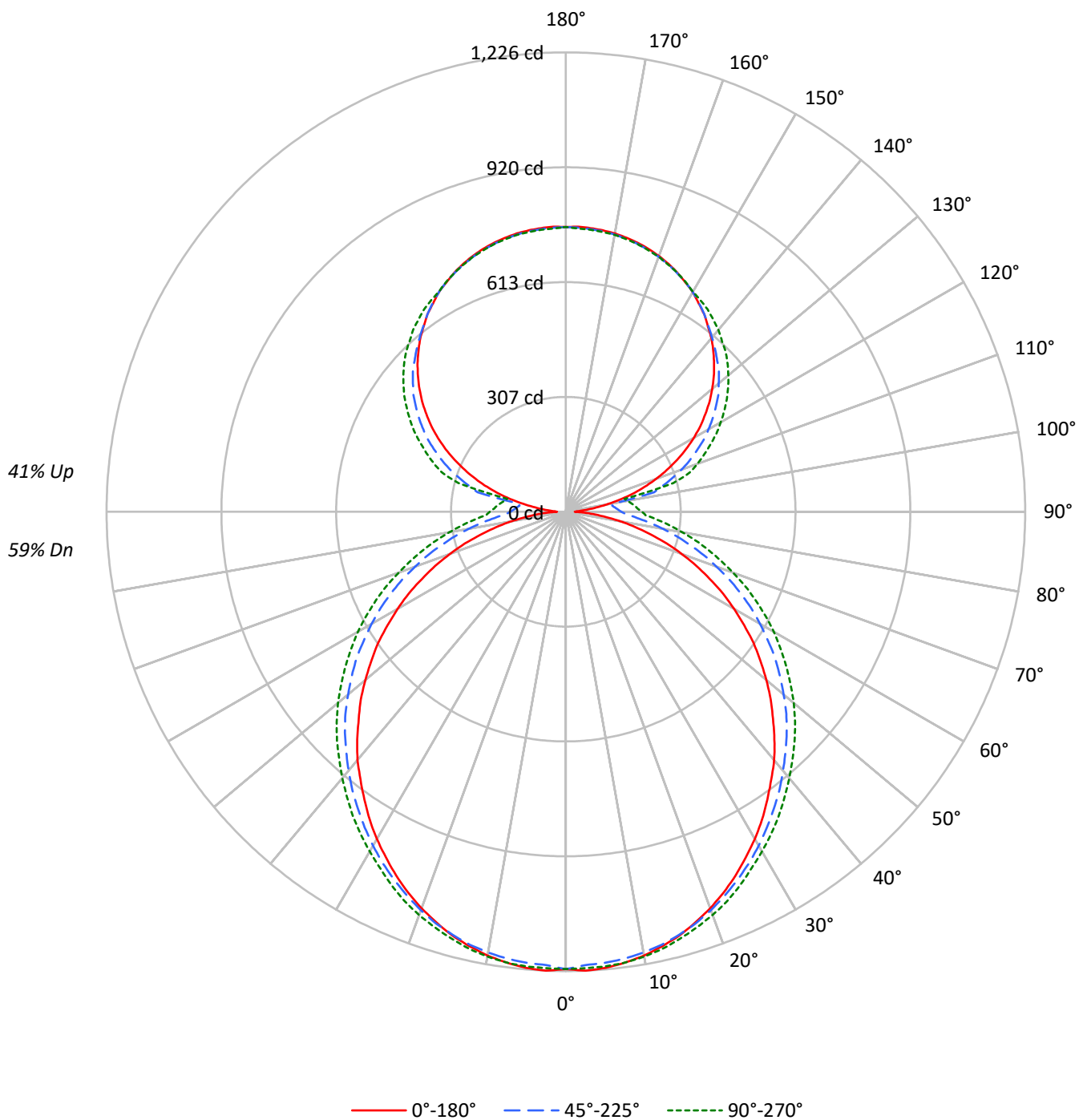
Lumens per Lamp: N/A
Luminaire Lumens: 6513.9 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 62.2
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	99	94	89	85	92	87	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	56	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	47	49	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	30	33	30	26
6	63	50	41	35	58	47	39	33	41	35	30	35	30	26	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	20
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9952	9952	9952
5°	9979	9692	9710
10°	9915	9502	9475
15°	9822	9287	9209
20°	9684	9055	8951
25°	9530	8800	8673
30°	9362	8546	8390
35°	9172	8286	8137
40°	9020	8037	7876
45°	8795	7804	7644
50°	8604	7539	7400
55°	8405	7283	7120
60°	8097	6965	6856
65°	7759	6622	6538
70°	7349	6230	6169
75°	6775	5792	5820
80°	6128	5350	5453
85°	5268	4902	5156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8795 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	1.8
10°-20°	331.3	5.1
20°-30°	501.0	7.7
30°-40°	606.1	9.3
40°-50°	640.7	9.8
50°-60°	603.0	9.3
60°-70°	500.4	7.7
70°-80°	351.1	5.4
80°-90°	199.5	3.1
90°-100°	143.1	2.2
100°-110°	253.4	3.9
110°-120°	375.8	5.8
120°-130°	435.7	6.7
130°-140°	445.0	6.8
140°-150°	405.7	6.2
150°-160°	324.9	5.0
160°-170°	209.5	3.2
170°-180°	72.2	1.1
0°-30°	947.9	14.6
0°-40°	1554.0	23.9
0°-60°	2797.7	42.9
0°-90°	3848.8	59.1
90°-120°	772.2	11.9
90°-150°	2058.6	31.6
90°-180°	2665.0	40.9
0°-180°	6513.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1222	1218	1208	1219	1218	116
15°	1171	1173	1168	1181	1179	330
25°	1072	1080	1084	1099	1100	494
35°	938	954	968	987	991	587
45°	782	808	834	857	864	604
55°	612	641	682	709	718	546
65°	424	467	514	548	559	420
75°	235	286	343	381	394	250
85°	72	130	191	232	246	75
90°	24	84	148	191	203	17
95°	49	75	131	172	185	53
105°	183	214	268	307	297	193
115°	328	342	385	416	426	323
125°	454	455	488	516	525	406
135°	560	559	571	594	603	432
145°	644	644	644	653	659	402
155°	704	705	703	705	704	325
165°	743	740	740	745	739	210
175°	760	756	757	762	755	72
180°	760	760	760	760	760	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1225.9	1221.8	1210.9	1220.4	1219.1
5°	1221.8	1217.7	1208.1	1219.1	1217.7
7.5°	1213.6	1210.9	1202.7	1215.0	1213.6
10°	1202.7	1201.3	1194.5	1206.8	1205.4
12.5°	1187.6	1187.6	1183.5	1194.5	1194.5
15°	1171.2	1172.6	1168.5	1180.8	1179.4
17.5°	1149.4	1153.5	1152.1	1164.4	1163.0
20°	1126.1	1130.2	1131.6	1145.3	1145.3
22.5°	1100.2	1105.6	1108.4	1122.0	1124.8
25°	1071.5	1079.7	1083.8	1098.8	1100.2
27.5°	1040.0	1052.3	1057.8	1071.5	1072.8
30°	1008.6	1019.5	1029.1	1044.1	1046.9
32.5°	974.4	988.1	999.0	1016.8	1019.5
35°	937.5	953.9	967.6	986.7	990.8
37.5°	900.6	919.8	936.2	955.3	959.4
40°	865.1	882.9	902.0	922.5	928.0
42.5°	824.1	844.6	867.8	891.1	895.2
45°	781.7	807.7	833.7	856.9	863.7
47.5°	742.1	768.1	798.1	821.4	829.6
50°	698.4	728.4	758.5	785.8	794.0
52.5°	654.6	684.7	720.2	747.6	755.8
55°	612.3	641.0	682.0	709.3	717.5
57.5°	564.4	600.0	639.6	672.4	679.2
60°	518.0	553.5	598.6	630.0	641.0
62.5°	472.9	512.5	557.6	589.0	600.0
65°	423.7	467.4	513.9	548.0	559.0
67.5°	377.2	423.7	472.9	507.0	518.0
70°	329.4	375.8	427.8	464.7	474.2
72.5°	282.9	330.7	386.8	422.3	433.2
75°	235.1	285.6	343.0	381.3	393.6
77.5°	190.0	243.3	303.4	341.7	355.3
80°	149.0	203.6	263.8	304.8	315.7
82.5°	108.0	165.4	225.5	267.9	280.2
85°	72.4	129.8	191.3	232.3	246.0
87.5°	45.1	101.1	161.3	200.9	213.2
90°	23.6	84.5	147.8	190.8	203.0
92.5°	29.0	75.7	139.0	180.7	191.6
95°	49.1	74.8	131.4	171.7	184.6
97.5°	76.1	128.2	124.6	162.9	175.8
100°	108.2	154.0	128.9	156.1	166.2
102.5°	145.7	182.6	241.4	149.1	160.0
105°	183.4	214.1	267.5	306.8	297.3
107.5°	220.3	245.2	297.1	334.0	345.9
110°	256.4	277.3	328.6	361.1	373.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.5	311.3	357.6	387.0	400.3
115°	327.6	341.6	384.8	416.0	425.6
117.5°	361.2	371.6	414.3	442.5	453.4
120°	393.9	400.2	439.4	467.8	477.6
122.5°	425.7	426.8	464.9	492.8	501.2
125°	454.5	455.4	488.4	516.1	524.8
127.5°	483.5	482.7	512.8	536.8	545.9
130°	509.9	509.1	532.7	557.9	566.1
132.5°	535.5	535.3	553.9	577.8	585.4
135°	559.7	559.1	571.0	594.0	603.4
137.5°	582.4	581.1	589.4	611.0	617.3
140°	604.6	604.4	606.9	626.4	633.8
142.5°	623.2	625.5	624.6	640.8	646.3
145°	643.7	644.0	644.0	652.7	659.4
147.5°	659.6	661.6	661.0	663.0	669.0
150°	677.2	678.1	677.5	677.5	678.1
152.5°	690.6	692.3	691.1	692.3	691.7
155°	704.2	704.8	703.1	705.3	703.6
157.5°	716.1	716.1	713.9	716.7	713.9
160°	726.4	724.7	724.1	727.5	724.1
162.5°	735.5	733.2	732.6	736.0	732.1
165°	742.9	740.0	740.0	744.6	739.4
167.5°	749.1	746.3	745.7	750.8	745.1
170°	754.2	750.8	751.4	755.9	750.2
172.5°	757.6	754.2	754.8	759.3	753.1
175°	759.9	756.5	757.1	762.2	755.4
177.5°	761.6	757.6	758.8	763.3	756.5
180°	759.9	759.9	759.9	759.9	759.9

(END OF REPORT)