

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: P1024917

Luminaire Tested: S124DIP-B1020D365UB35-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024917
REPORT IS A COMBINATION OF REPORTS P995277 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB35-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

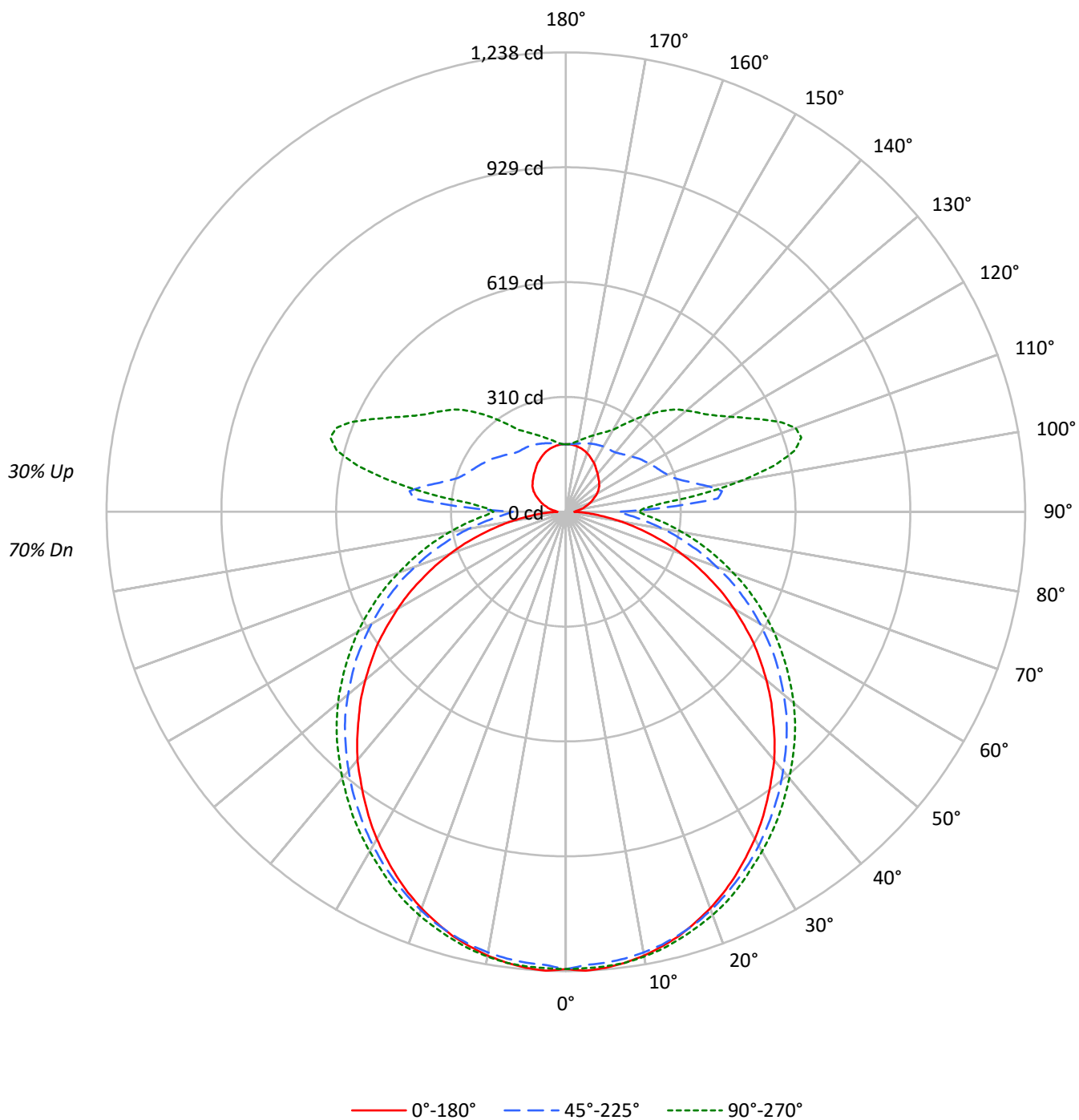
Lumens per Lamp: N/A
Luminaire Lumens: 5529.6 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	75	75	75
1	101	96	91	87	95	91	87	83	81	78	75	72	70	67	64	62	60	60	60	56
2	91	83	76	70	86	78	72	67	70	65	61	62	59	55	55	52	50	50	50	46
3	83	72	64	58	78	69	61	55	61	55	51	55	50	46	49	45	42	42	42	38
4	76	64	55	49	71	61	53	47	54	48	43	49	43	39	43	39	35	35	35	32
5	69	57	48	41	65	54	46	40	48	42	37	43	38	34	39	34	31	31	31	28
6	64	51	42	36	60	48	40	35	44	37	32	39	34	29	35	30	27	27	27	24
7	59	46	37	31	56	44	36	30	40	33	28	36	30	26	32	27	24	24	24	21
8	55	42	33	28	52	40	32	27	36	30	25	33	27	23	29	25	21	21	21	19
9	51	38	30	25	48	36	29	24	33	27	22	30	25	21	27	22	19	19	19	17
10	48	35	27	22	45	34	26	22	31	24	20	28	22	19	25	21	17	17	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10050	10050	10050
5°	10078	9788	9806
10°	10012	9595	9568
15°	9919	9379	9300
20°	9779	9145	9040
25°	9623	8887	8759
30°	9454	8630	8472
35°	9263	8368	8217
40°	9108	8117	7953
45°	8881	7881	7720
50°	8689	7613	7474
55°	8487	7355	7190
60°	8177	7033	6923
65°	7834	6686	6602
70°	7420	6291	6231
75°	6841	5850	5877
80°	6186	5403	5507
85°	5319	4951	5207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	2.1
10°-20°	334.6	6.1
20°-30°	505.9	9.1
30°-40°	612.0	11.1
40°-50°	647.0	11.7
50°-60°	608.9	11.0
60°-70°	505.3	9.1
70°-80°	354.6	6.4
80°-90°	200.6	3.6
90°-100°	254.1	4.6
100°-110°	362.8	6.6
110°-120°	304.0	5.5
120°-130°	239.0	4.3
130°-140°	186.0	3.4
140°-150°	133.9	2.4
150°-160°	92.1	1.7
160°-170°	54.2	1.0
170°-180°	17.6	0.3
0°-30°	957.3	17.3
0°-40°	1569.3	28.4
0°-60°	2825.3	51.1
0°-90°	3885.8	70.3
90°-120°	920.9	16.7
90°-150°	1479.9	26.8
90°-180°	1644.0	29.7
0°-180°	5529.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1234	1230	1220	1231	1230	117
15°	1183	1184	1180	1192	1191	333
25°	1082	1090	1094	1110	1111	498
35°	947	963	977	996	1001	593
45°	789	816	842	865	872	610
55°	618	647	689	716	725	551
65°	428	472	519	553	564	424
75°	237	288	346	385	398	252
85°	73	131	193	235	248	76
90°	22	80	143	184	195	16
95°	30	101	411	302	257	27
105°	54	101	325	630	639	59
115°	82	113	274	497	588	82
125°	108	126	246	407	458	97
135°	125	148	218	338	387	97
145°	142	161	205	264	295	89
155°	160	172	199	226	235	74
165°	174	179	191	202	205	49
175°	182	182	183	186	185	17
180°	182	182	182	182	182	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1238.0	1233.9	1222.8	1232.5	1231.1
5°	1233.9	1229.7	1220.0	1231.1	1229.7
7.5°	1225.6	1222.8	1214.5	1227.0	1225.6
10°	1214.5	1213.1	1206.2	1218.7	1217.3
12.5°	1199.3	1199.3	1195.2	1206.2	1206.2
15°	1182.8	1184.2	1180.0	1192.4	1191.1
17.5°	1160.7	1164.8	1163.5	1175.9	1174.5
20°	1137.2	1141.4	1142.8	1156.6	1156.6
22.5°	1111.0	1116.5	1119.3	1133.1	1135.9
25°	1082.0	1090.3	1094.5	1109.6	1111.0
27.5°	1050.3	1062.7	1068.2	1082.0	1083.4
30°	1018.5	1029.6	1039.3	1054.4	1057.2
32.5°	984.0	997.8	1008.9	1026.8	1029.6
35°	946.8	963.3	977.1	996.5	1000.6
37.5°	909.5	928.8	945.4	964.7	968.9
40°	873.6	891.6	910.9	931.6	937.1
42.5°	832.2	852.9	876.4	899.9	904.0
45°	789.4	815.7	841.9	865.4	872.3
47.5°	749.4	775.6	806.0	829.5	837.7
50°	705.3	735.6	766.0	793.6	801.9
52.5°	661.1	691.5	727.3	754.9	763.2
55°	618.3	647.3	688.7	716.3	724.6
57.5°	570.0	605.9	645.9	679.0	685.9
60°	523.1	559.0	604.5	636.2	647.3
62.5°	477.5	517.6	563.1	594.8	605.9
65°	427.8	472.0	518.9	553.4	564.5
67.5°	380.9	427.8	477.5	512.0	523.1
70°	332.6	379.5	432.0	469.2	478.9
72.5°	285.7	334.0	390.6	426.5	437.5
75°	237.4	288.5	346.4	385.1	397.5
77.5°	191.8	245.7	306.4	345.0	358.8
80°	150.4	205.6	266.4	307.8	318.8
82.5°	109.0	167.0	227.7	270.5	282.9
85°	73.1	131.1	193.2	234.6	248.4
87.5°	45.5	102.1	162.9	202.9	215.3
90°	22.5	80.2	143.0	183.8	195.2
92.5°	25.7	96.5	268.4	213.2	210.5
95°	29.7	100.6	411.2	301.5	257.0
97.5°	36.2	97.7	424.7	443.4	370.8
100°	42.3	97.6	392.1	549.4	479.4
102.5°	49.5	98.4	354.8	611.8	575.4
105°	54.2	100.6	325.4	630.2	639.2
107.5°	62.4	104.3	303.9	615.2	665.3
110°	69.2	106.6	291.6	578.4	659.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	75.8	110.3	281.5	535.1	629.7
115°	81.9	113.0	273.9	496.7	587.5
117.5°	89.7	116.6	266.6	463.8	547.4
120°	96.2	118.5	259.7	439.0	511.9
122.5°	103.3	121.8	252.5	421.2	482.2
125°	108.0	125.9	246.5	406.6	458.2
127.5°	113.7	132.3	238.9	391.0	441.3
130°	117.0	137.3	231.6	375.3	424.5
132.5°	121.6	142.6	225.8	358.0	408.0
135°	124.6	147.9	218.5	337.8	387.2
137.5°	128.9	150.9	213.0	318.0	364.2
140°	133.5	155.0	208.6	298.6	341.2
142.5°	137.1	158.8	205.8	281.6	317.2
145°	141.8	160.8	205.0	264.1	294.9
147.5°	147.1	164.0	204.0	248.4	273.7
150°	152.1	167.0	202.9	239.0	255.1
152.5°	155.4	169.9	201.1	232.2	244.3
155°	159.7	172.4	199.3	225.8	235.4
157.5°	164.0	174.6	197.5	219.7	227.2
160°	167.9	176.6	195.4	213.6	219.7
162.5°	171.5	178.2	193.3	207.8	212.5
165°	174.0	179.4	191.1	202.4	205.4
167.5°	176.8	180.2	189.0	197.8	199.7
170°	178.6	181.0	186.8	193.0	194.3
172.5°	180.4	181.4	184.7	189.0	189.0
175°	181.5	181.8	183.3	185.8	185.0
177.5°	182.2	181.8	182.2	183.4	182.2
180°	181.8	181.8	181.8	181.8	181.8

(END OF REPORT)