

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: P1011456

Luminaire Tested: S123DIP-B1165D805UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011456
REPORT IS A COMBINATION OF REPORTS P989618 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB50-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

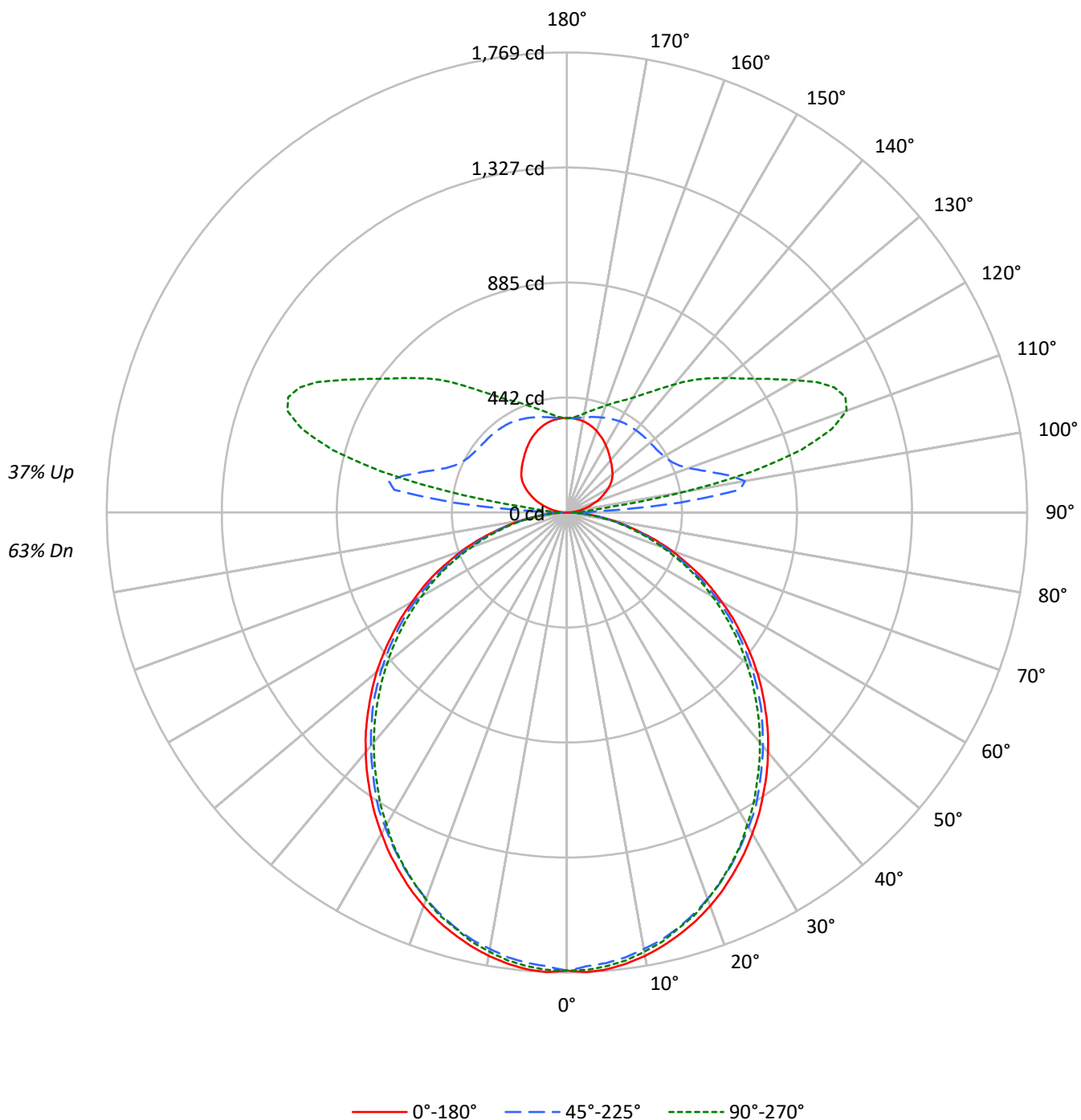
Lumens per Lamp: N/A
Luminaire Lumens: 7321.3 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 82.4
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	79	79	79	68	68	68
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	60	58	57
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48
3	84	74	66	60	78	69	63	57	61	56	52	54	50	46	47	43	41
4	76	65	57	51	71	62	54	49	54	49	44	48	43	40	42	38	35
5	70	58	50	44	66	55	47	42	49	43	38	43	38	34	37	34	31
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	34	28	36	30	26	32	27	24	29	25	22
9	52	39	32	27	49	37	30	25	33	28	23	30	25	21	26	22	19
10	49	36	29	24	45	34	28	23	31	25	21	28	23	19	24	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.3
10°-20°	469.0	6.4
20°-30°	692.6	9.5
30°-40°	808.9	11.0
40°-50°	813.2	11.1
50°-60°	714.4	9.8
60°-70°	532.0	7.3
70°-80°	302.8	4.1
80°-90°	88.1	1.2
90°-100°	206.1	2.8
100°-110°	576.0	7.9
110°-120°	561.7	7.7
120°-130°	447.2	6.1
130°-140°	353.1	4.8
140°-150°	263.4	3.6
150°-160°	183.8	2.5
160°-170°	107.9	1.5
170°-180°	35.1	0.5
0°-30°	1327.7	18.1
0°-40°	2136.6	29.2
0°-60°	3664.1	50.0
0°-90°	4587.0	62.7
90°-120°	1343.8	18.4
90°-150°	2407.5	32.9
90°-180°	2734.0	37.3
0°-180°	7321.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	2	9	18	21	21	7
95°	25	81	435	127	85	26
105°	85	126	590	1032	934	90
115°	150	188	452	990	1136	149
125°	209	247	421	764	896	186
135°	245	293	416	629	726	189
145°	280	320	410	516	568	175
155°	318	343	397	452	471	146
165°	347	357	380	403	410	98
175°	362	362	365	370	369	34
180°	363	363	363	363	363	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	1.5	8.8	18.4	20.6	21.3
92.5°	11.0	44.0	136.5	46.6	38.9
95°	25.0	81.1	435.3	127.0	85.2
97.5°	39.6	92.9	669.5	319.4	174.7
100°	54.3	102.4	695.2	668.0	460.3
102.5°	69.7	113.4	647.5	894.6	729.0
105°	85.2	125.9	590.2	1032.2	933.8
107.5°	101.3	140.6	539.6	1092.8	1067.4
110°	118.9	155.6	497.7	1094.6	1143.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.1	171.4	469.8	1053.1	1159.2
115°	150.5	187.6	451.5	990.0	1135.7
117.5°	165.9	203.0	439.0	922.4	1084.3
120°	182.1	218.4	430.9	858.6	1016.8
122.5°	196.0	233.1	425.8	808.3	953.6
125°	209.2	247.0	421.4	763.5	895.6
127.5°	219.5	260.2	419.2	726.8	845.7
130°	229.1	272.0	417.0	693.0	804.6
132.5°	236.4	282.6	416.3	661.4	764.2
135°	245.2	292.6	415.5	628.8	726.1
137.5°	253.3	300.6	414.1	598.0	685.7
140°	261.4	308.0	413.3	567.8	643.1
142.5°	270.2	314.6	411.9	540.3	603.5
145°	279.7	320.4	410.4	515.8	567.5
147.5°	289.2	326.6	408.2	496.6	536.7
150°	298.8	331.8	405.2	479.8	510.2
152.5°	308.3	337.4	401.6	465.1	488.2
155°	317.9	342.8	397.2	451.5	470.6
157.5°	325.2	347.6	393.5	438.3	453.7
160°	334.0	351.6	389.1	426.2	437.5
162.5°	340.6	354.6	384.7	414.8	422.9
165°	347.2	357.2	380.3	403.4	410.4
167.5°	352.4	359.4	375.9	393.5	397.9
170°	356.8	360.4	371.5	384.7	386.9
172.5°	359.7	361.5	367.8	377.0	376.6
175°	361.9	362.3	364.9	370.0	369.3
177.5°	363.4	362.7	362.7	365.6	364.1
180°	362.7	362.7	362.7	362.7	362.7

(END OF REPORT)