

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: P1012399

Luminaire Tested: S123RDIP-B1165D805UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012399
REPORT IS A COMBINATION OF REPORTS P993112 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D805UB40-4F0-XX-W2A-F4
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

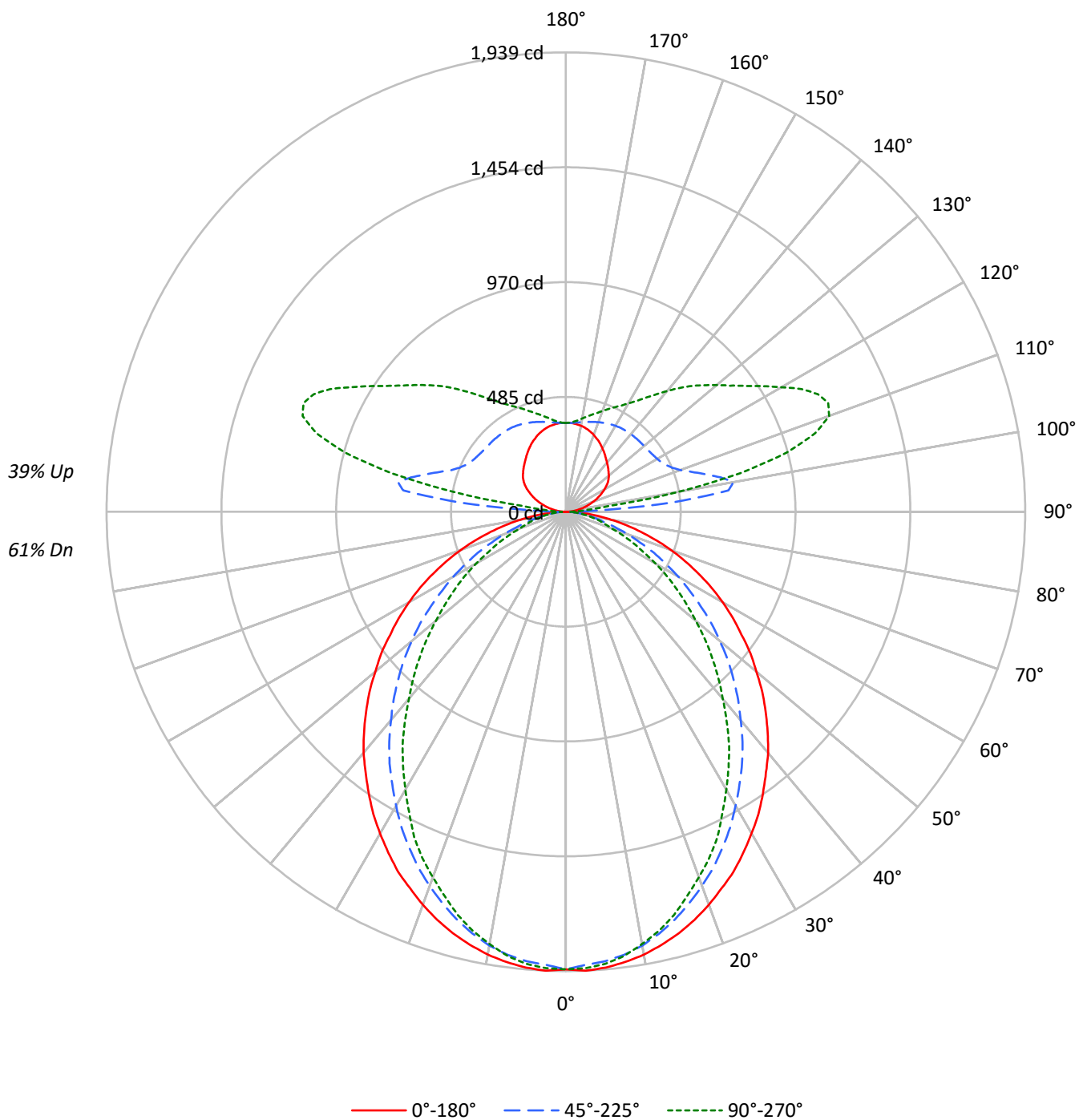
Lumens per Lamp: N/A
Luminaire Lumens: 7192.6 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	89	89	89	77	77	77	66	66	66
1	101	96	93	89	94	90	87	84	79	77	74	69	67	65	59	58	57
2	92	85	79	73	86	79	74	70	70	66	62	61	58	55	52	50	48
3	84	75	67	62	78	70	64	59	62	57	53	54	50	47	47	44	41
4	77	66	59	53	72	63	56	50	55	50	45	48	44	41	42	39	36
5	71	59	51	45	66	56	49	43	50	44	39	44	39	35	38	34	32
6	66	53	45	40	61	51	43	38	45	39	35	40	35	31	35	31	28
7	61	48	41	35	57	46	39	33	41	35	31	36	31	28	32	28	25
8	56	44	36	31	53	42	35	30	37	32	27	33	28	25	29	25	23
9	53	40	33	28	49	38	31	27	34	29	25	31	26	23	27	23	20
10	49	37	30	25	46	35	29	24	32	26	22	28	24	20	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20787	20787	20787
5°	20821	20052	19998
10°	20657	19298	18918
15°	20390	18367	17735
20°	20038	17353	16413
25°	19675	16299	15161
30°	19210	15180	13680
35°	18731	14079	12332
40°	18279	12884	10842
45°	17701	11715	9503
50°	17064	10467	8117
55°	16403	9131	6847
60°	15771	7762	5557
65°	14956	6356	4338
70°	13929	4806	3101
75°	12454	3254	2456
80°	10630	2262	1722
85°	7973	1222	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	2.5
10°-20°	505.0	7.0
20°-30°	727.2	10.1
30°-40°	818.9	11.4
40°-50°	783.3	10.9
50°-60°	641.2	8.9
60°-70°	432.3	6.0
70°-80°	216.8	3.0
80°-90°	58.8	0.8
90°-100°	213.1	3.0
100°-110°	595.7	8.3
110°-120°	580.8	8.1
120°-130°	462.5	6.4
130°-140°	365.1	5.1
140°-150°	272.4	3.8
150°-160°	190.0	2.6
160°-170°	111.6	1.6
170°-180°	36.3	0.5
0°-30°	1413.8	19.7
0°-40°	2232.6	31.0
0°-60°	3657.2	50.8
0°-90°	4365.1	60.7
90°-120°	1389.6	19.3
90°-150°	2489.6	34.6
90°-180°	2828.0	39.3
0°-180°	7192.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1931	1923	1905	1919	1916	183
15°	1842	1825	1781	1773	1762	519
25°	1676	1637	1565	1532	1515	771
35°	1450	1394	1297	1230	1201	908
45°	1192	1122	1001	912	874	920
55°	905	829	695	605	573	812
65°	619	532	410	334	316	612
75°	327	252	166	150	147	349
85°	83	49	44	41	41	91
90°	2	9	19	21	22	7
95°	26	84	450	131	88	27
105°	88	130	610	1067	966	94
115°	156	194	467	1024	1174	154
125°	216	255	436	790	926	192
135°	254	303	430	650	751	196
145°	289	331	424	533	587	181
155°	329	354	411	467	487	151
165°	359	369	393	417	424	101
175°	374	375	377	383	382	36
180°	375	375	375	375	375	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.2	1931.2	1931.2	1931.2	1931.2
2.5°	1939.1	1932.8	1914.0	1931.2	1928.1
5°	1931.2	1923.4	1904.6	1918.7	1915.6
7.5°	1917.1	1909.3	1885.8	1895.2	1890.5
10°	1898.3	1887.4	1859.2	1860.8	1852.9
12.5°	1871.7	1859.2	1823.2	1821.6	1812.2
15°	1842.0	1824.7	1780.9	1773.0	1762.1
17.5°	1805.9	1787.1	1732.3	1716.7	1701.0
20°	1765.2	1740.1	1680.6	1660.3	1641.5
22.5°	1719.8	1690.0	1625.8	1599.2	1582.0
25°	1675.9	1636.8	1564.7	1531.8	1514.6
27.5°	1622.7	1580.4	1502.1	1458.2	1431.6
30°	1567.9	1520.9	1433.2	1379.9	1354.8
32.5°	1513.0	1458.2	1364.2	1304.7	1278.1
35°	1450.4	1394.0	1296.9	1229.5	1201.3
37.5°	1387.7	1326.6	1224.8	1149.7	1115.2
40°	1328.2	1259.3	1148.1	1066.6	1030.6
42.5°	1260.9	1191.9	1076.0	985.2	953.9
45°	1191.9	1121.5	1000.9	911.6	874.0
47.5°	1124.6	1046.3	927.2	830.1	797.2
50°	1049.4	975.8	848.9	751.8	715.8
52.5°	982.1	900.6	775.3	673.5	642.2
55°	905.3	828.6	695.4	604.6	573.3
57.5°	836.4	753.4	618.7	532.5	505.9
60°	764.3	678.2	548.2	463.6	437.0
62.5°	692.3	606.2	476.2	397.8	369.6
65°	618.7	532.5	410.4	333.6	316.4
67.5°	545.1	457.4	338.3	280.4	261.6
70°	473.0	388.4	278.8	224.0	206.8
72.5°	401.0	318.0	220.8	178.6	173.9
75°	327.4	252.2	166.0	150.4	147.2
77.5°	260.0	191.1	130.0	120.6	117.5
80°	195.8	131.6	98.7	94.0	90.8
82.5°	134.7	81.4	70.5	65.8	65.8
85°	83.0	48.6	43.9	40.7	40.7
87.5°	37.6	20.4	20.4	18.8	17.2
90°	1.5	9.2	19.0	21.2	22.0
92.5°	11.4	45.6	141.2	48.2	40.2
95°	25.8	83.9	450.2	131.4	88.1
97.5°	41.0	96.1	692.3	330.2	180.7
100°	56.2	105.9	718.9	690.8	476.0
102.5°	72.1	117.3	669.6	925.0	753.8
105°	88.1	130.2	610.4	1067.4	965.6
107.5°	104.8	145.4	558.0	1130.0	1103.8
110°	123.0	161.0	514.7	1131.9	1182.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.7	177.2	485.9	1089.0	1198.7
115°	155.6	194.0	466.9	1023.7	1174.4
117.5°	171.6	209.9	454.0	953.9	1121.3
120°	188.3	225.8	445.6	887.8	1051.4
122.5°	202.7	241.0	440.3	835.8	986.1
125°	216.4	255.4	435.7	789.5	926.2
127.5°	227.0	269.2	433.5	751.6	874.5
130°	236.9	281.2	431.2	716.6	832.0
132.5°	244.4	292.2	430.4	684.0	790.3
135°	253.6	302.6	429.7	650.2	750.8
137.5°	261.9	310.9	428.2	618.4	709.0
140°	270.3	318.5	427.4	587.2	665.0
142.5°	279.4	325.3	425.9	558.8	624.0
145°	289.2	331.4	424.4	533.3	586.8
147.5°	299.1	337.8	422.1	513.6	554.9
150°	309.0	343.2	419.0	496.1	527.6
152.5°	318.8	348.8	415.3	480.9	504.8
155°	328.7	354.5	410.7	466.8	486.6
157.5°	336.3	359.5	406.9	453.2	469.2
160°	345.4	363.6	402.3	440.6	452.5
162.5°	352.2	366.6	397.8	428.9	437.3
165°	359.1	369.4	393.2	417.2	424.4
167.5°	364.4	371.6	388.7	406.9	411.5
170°	368.9	372.8	384.1	397.8	400.1
172.5°	372.0	373.9	380.3	389.8	389.4
175°	374.3	374.6	377.3	382.6	381.9
177.5°	375.8	375.0	375.0	378.1	376.5
180°	375.0	375.0	375.0	375.0	375.0

(END OF REPORT)