

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P199484

Luminaire Tested: **S124-DIP-U2-1-30-X-X0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199484
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P28062 P28061)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124-DIP-U2-1-30-X-X0048-1D-UDD-1-NA-W
Description: DEFINE 4-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE
UPLIGHT LL2-3000K, NO LENS
DOWNLIGHT LL1-3000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7753.1 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.14 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4.08' x H: 0.38')
CIE Type: Semi-Indirect

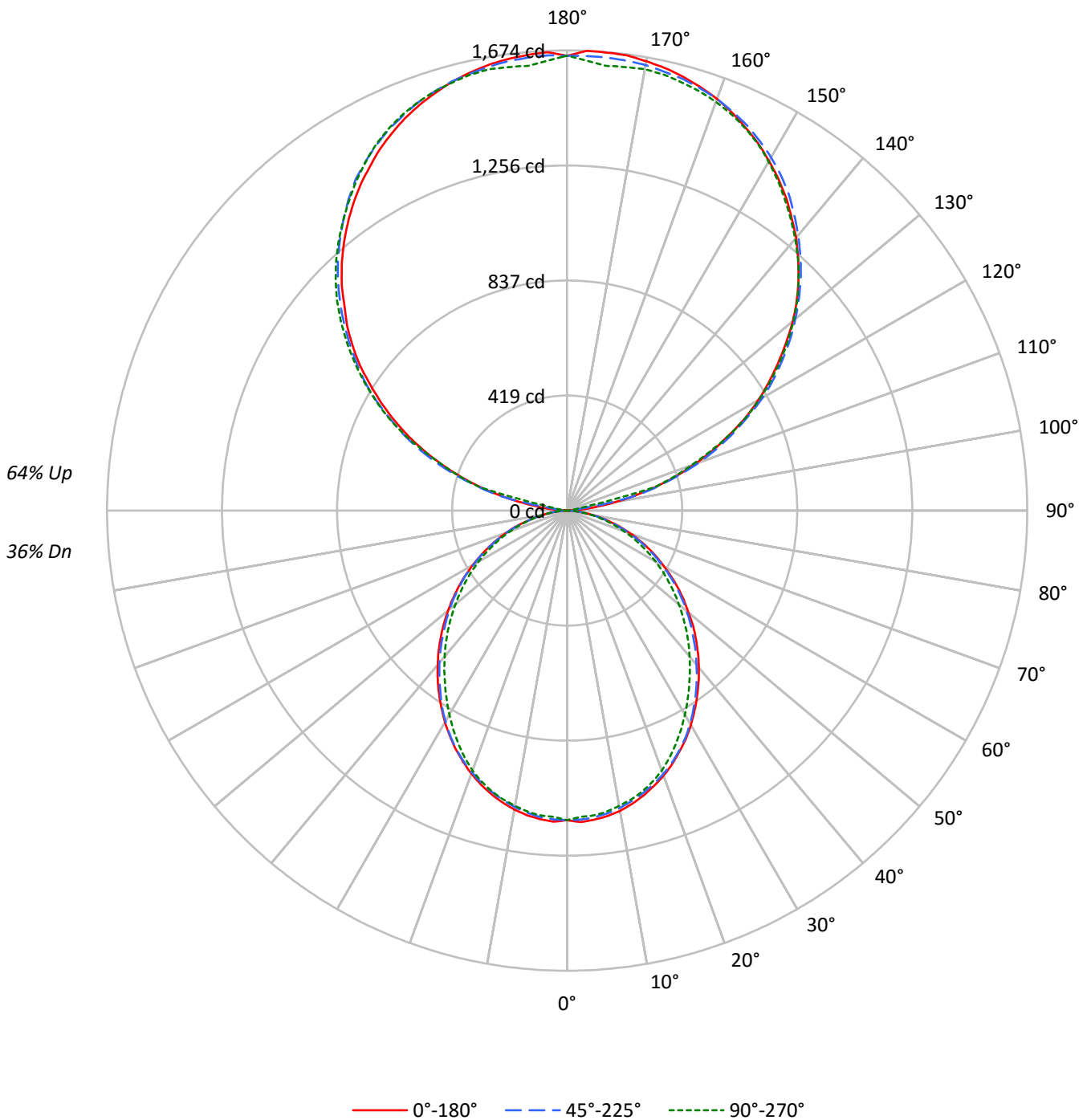
Input Watts (W): 65.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	91	87	83	86	82	79	76	66	64	62	52	50	49	38	37	37	30
2	86	79	73	68	78	72	67	62	58	55	51	45	43	41	34	32	31	26
3	79	70	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	61	54	48	65	56	49	44	46	41	37	36	32	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	16
6	61	49	41	35	55	45	38	33	37	31	28	29	25	22	22	19	17	14
7	56	44	36	31	51	40	34	29	33	28	24	26	23	20	20	17	16	13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14	11
9	48	36	29	24	44	33	27	23	28	23	19	22	18	16	17	14	13	10
10	45	33	26	22	41	31	24	20	25	21	17	20	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8906	8906	8906
5°	8890	8045	8874
10°	8764	7309	8727
15°	8574	6651	8530
20°	8355	6009	8294
25°	8090	5358	8015
30°	7811	4745	7711
35°	7479	4180	7374
40°	7146	3681	7022
45°	6785	3221	6653
50°	6380	2788	6267
55°	6016	2384	5859
60°	5565	1998	5407
65°	5120	1620	4917
70°	4551	1247	4337
75°	3828	876	3548
80°	2875	534	2692
85°	1687	236	1598



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	1.4
10°-20°	298.9	3.9
20°-30°	437.9	5.6
30°-40°	501.8	6.5
40°-50°	494.7	6.4
50°-60°	426.4	5.5
60°-70°	310.9	4.0
70°-80°	169.6	2.2
80°-90°	44.5	0.6
90°-100°	42.1	0.5
100°-110°	334.5	4.3
110°-120°	647.2	8.3
120°-130°	841.6	10.9
130°-140°	913.6	11.8
140°-150°	864.5	11.2
150°-160°	705.2	9.1
160°-170°	456.5	5.9
170°-180°	157.1	2.0
0°-30°	842.8	10.9
0°-40°	1344.6	17.3
0°-60°	2265.8	29.2
0°-90°	2790.8	36.0
90°-120°	1023.8	13.2
90°-150°	3643.5	47.0
90°-180°	4962.0	64.0
0°-180°	7753.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1126	1126	1126	1126	1126	
5°	1129	1121	1113	1119	1127	107
15°	1073	1065	1057	1059	1068	302
25°	967	964	936	956	958	445
35°	824	816	774	804	813	516
45°	662	649	612	638	650	511
55°	494	485	451	475	481	440
65°	328	320	296	312	314	324
75°	168	162	149	155	156	179
85°	38	39	36	37	36	43
90°	1	3	2	3	1	5
95°	58	15	16	16	52	73
105°	333	342	328	334	324	352
115°	650	667	653	658	633	644
125°	937	957	945	935	920	838
135°	1190	1203	1191	1179	1160	917
145°	1389	1406	1381	1385	1359	868
155°	1537	1547	1534	1531	1512	709
165°	1633	1625	1612	1616	1615	461
175°	1672	1655	1624	1654	1663	159
180°	1655	1655	1655	1655	1655	



TEST NUMBER: P199484

CATALOG NUMBER: S124-DIP-U2-1-30-X-X0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1126.1	1126.1	1126.1	1126.1	1126.1	1126.1	1126.1	1126.1	1126.1
2.5°	1134.3	1121.3	1125.4	1122.7	1115.2	1122.7	1124.7	1120.6	1132.9
5°	1128.8	1116.6	1120.6	1116.6	1113.2	1115.9	1119.3	1114.5	1126.8
7.5°	1120.6	1107.7	1111.1	1107.7	1104.3	1107.0	1109.1	1105.0	1117.9
10°	1109.1	1095.5	1098.9	1094.8	1090.7	1093.4	1095.5	1091.4	1104.3
12.5°	1092.7	1079.8	1082.5	1079.8	1076.4	1077.1	1078.4	1074.4	1088.0
15°	1073.0	1060.1	1064.8	1062.1	1057.3	1060.1	1059.4	1054.6	1067.5
17.5°	1050.5	1038.3	1043.7	1041.0	1034.2	1038.3	1038.3	1030.8	1044.4
20°	1026.0	1013.1	1020.6	1013.8	1006.3	1010.4	1013.8	1004.9	1018.5
22.5°	998.8	985.2	994.0	981.8	973.6	978.4	986.5	977.0	989.2
25°	966.8	955.9	964.1	947.0	936.1	943.0	955.9	946.4	957.9
27.5°	935.5	924.6	931.4	912.3	897.3	906.2	922.5	914.4	924.6
30°	900.7	891.9	895.3	872.8	857.2	866.7	885.8	881.0	889.2
32.5°	862.6	855.8	855.8	832.0	815.6	826.5	847.0	845.6	851.0
35°	824.5	820.4	815.6	789.8	774.1	784.3	804.1	809.5	812.9
37.5°	785.7	783.0	774.1	748.9	733.9	744.8	763.2	771.4	773.4
40°	745.5	744.1	731.9	708.1	693.1	704.0	723.0	733.3	732.6
42.5°	704.7	706.0	691.0	667.9	652.9	663.8	681.5	695.1	691.7
45°	662.4	666.5	648.8	627.7	612.1	623.6	637.9	655.0	649.5
47.5°	621.6	626.4	608.0	586.2	571.2	583.5	597.8	616.2	608.0
50°	575.3	584.8	567.1	545.3	530.4	541.9	559.0	574.6	565.1
52.5°	535.1	541.9	526.3	505.2	490.9	500.4	517.4	533.1	522.9
55°	493.6	501.1	485.4	464.3	450.7	460.2	475.2	490.9	480.7
57.5°	450.0	457.5	443.2	424.2	411.2	421.4	437.1	448.0	438.5
60°	407.8	417.3	401.7	383.3	372.4	380.6	392.8	405.8	396.2
62.5°	367.0	375.8	360.8	343.8	333.6	341.1	354.0	364.2	355.4
65°	327.5	332.9	320.0	304.3	295.5	300.2	311.8	323.4	314.5
67.5°	287.3	292.8	279.8	266.2	257.4	262.1	271.7	282.5	274.4
70°	246.5	251.2	240.3	228.1	220.6	225.4	234.2	242.4	234.9
72.5°	207.7	211.1	200.8	191.3	185.9	189.3	195.4	202.9	199.5
75°	168.2	172.3	162.0	153.9	149.1	150.5	155.2	161.4	155.9
77.5°	130.7	134.8	126.6	120.5	117.8	118.5	121.9	126.6	119.8
80°	96.0	99.4	94.6	89.2	86.5	87.8	89.9	92.6	89.9
82.5°	64.7	68.1	64.7	61.3	59.2	60.6	61.3	62.6	60.6
85°	38.1	40.8	38.8	36.8	36.1	36.1	36.8	38.1	36.1
87.5°	17.0	19.1	17.7	16.3	14.3	15.0	15.7	17.0	15.7
90°	1.4	3.4	2.7	2.0	2.0	2.0	2.7	3.4	1.4
92.5°	18.6	9.8	9.8	9.8	9.8	9.8	9.8	10.8	12.7
95°	57.8	37.2	14.7	15.7	15.7	15.7	15.7	25.5	52.0
97.5°	112.7	131.4	28.4	18.6	18.6	18.6	28.4	124.5	104.9
100°	178.4	196.0	143.1	45.1	33.3	42.1	125.5	185.3	169.6
102.5°	251.9	274.5	263.7	148.0	85.3	126.4	255.8	262.7	245.1
105°	333.3	352.9	342.1	347.0	328.4	334.3	334.3	338.2	323.5
107.5°	413.7	430.3	424.4	420.5	405.8	409.7	419.5	417.6	400.9
110°	494.0	510.7	510.7	498.0	480.3	487.2	502.9	493.1	479.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	574.4	587.2	590.1	583.2	562.6	572.5	581.3	565.6	556.8
115°	649.9	668.5	666.6	667.5	652.8	652.8	657.7	646.0	633.2
117.5°	731.2	745.0	742.0	743.0	733.2	729.3	728.3	720.5	706.7
120°	802.8	818.5	820.4	813.6	806.7	798.9	803.8	793.0	778.3
122.5°	870.4	888.1	891.0	884.2	877.3	868.5	872.4	860.6	846.9
125°	937.1	956.7	956.7	951.8	944.9	936.1	935.1	925.3	920.4
127.5°	1003.8	1026.3	1022.4	1017.5	1011.6	1001.8	996.9	991.0	983.2
130°	1071.4	1087.1	1083.2	1079.2	1075.3	1063.5	1059.6	1053.7	1044.9
132.5°	1133.1	1142.0	1143.9	1136.1	1136.1	1121.4	1120.4	1113.5	1097.9
135°	1190.0	1198.8	1202.7	1191.0	1191.0	1176.3	1179.2	1169.4	1159.6
137.5°	1243.9	1250.8	1255.7	1241.9	1242.9	1229.2	1234.1	1217.4	1213.5
140°	1295.9	1298.8	1307.6	1292.9	1291.0	1279.2	1286.1	1269.4	1264.5
142.5°	1341.9	1345.9	1356.6	1340.9	1336.0	1327.2	1336.0	1315.5	1312.5
145°	1389.0	1390.0	1405.6	1387.0	1381.1	1374.3	1385.1	1360.6	1358.6
147.5°	1430.2	1428.2	1446.8	1431.1	1425.2	1418.4	1430.2	1401.7	1401.7
150°	1468.4	1466.4	1484.1	1471.3	1465.4	1459.6	1466.4	1440.0	1440.0
152.5°	1505.6	1498.8	1516.4	1505.6	1503.7	1494.8	1500.7	1475.2	1479.2
155°	1537.0	1530.1	1546.8	1538.0	1534.1	1527.2	1531.1	1506.6	1512.5
157.5°	1567.4	1556.6	1571.3	1567.4	1560.5	1556.6	1556.6	1537.0	1543.9
160°	1593.8	1581.1	1593.8	1588.0	1582.1	1577.2	1581.1	1561.5	1570.3
162.5°	1615.4	1603.7	1610.5	1602.7	1599.7	1591.9	1599.7	1584.0	1593.8
165°	1633.1	1620.3	1625.2	1614.4	1612.5	1606.6	1616.4	1605.6	1615.4
167.5°	1648.7	1637.0	1635.0	1624.2	1624.2	1616.4	1628.2	1622.3	1632.1
170°	1659.5	1649.7	1645.8	1630.1	1630.1	1623.3	1639.9	1635.0	1646.8
172.5°	1670.3	1657.6	1650.7	1634.0	1627.2	1628.2	1648.7	1644.8	1656.6
175°	1672.3	1662.5	1654.6	1637.0	1624.2	1633.1	1653.6	1654.6	1663.4
177.5°	1674.2	1664.4	1654.6	1639.9	1638.0	1636.0	1657.6	1656.6	1669.3
180°	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6

(END OF REPORT)