

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: P199411

Luminaire Tested: **S122-DIP-U2-2-35-X-X0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199411
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27883 P27986)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DIP-U2-2-35-X-X0048-1D-UDD-1-NA-W
Description: DEFINE 2-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE
UPLIGHT LL2-3500K, NO LENS
DOWNLIGHT LL2-3500K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8226.1 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.17 / 1.31
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

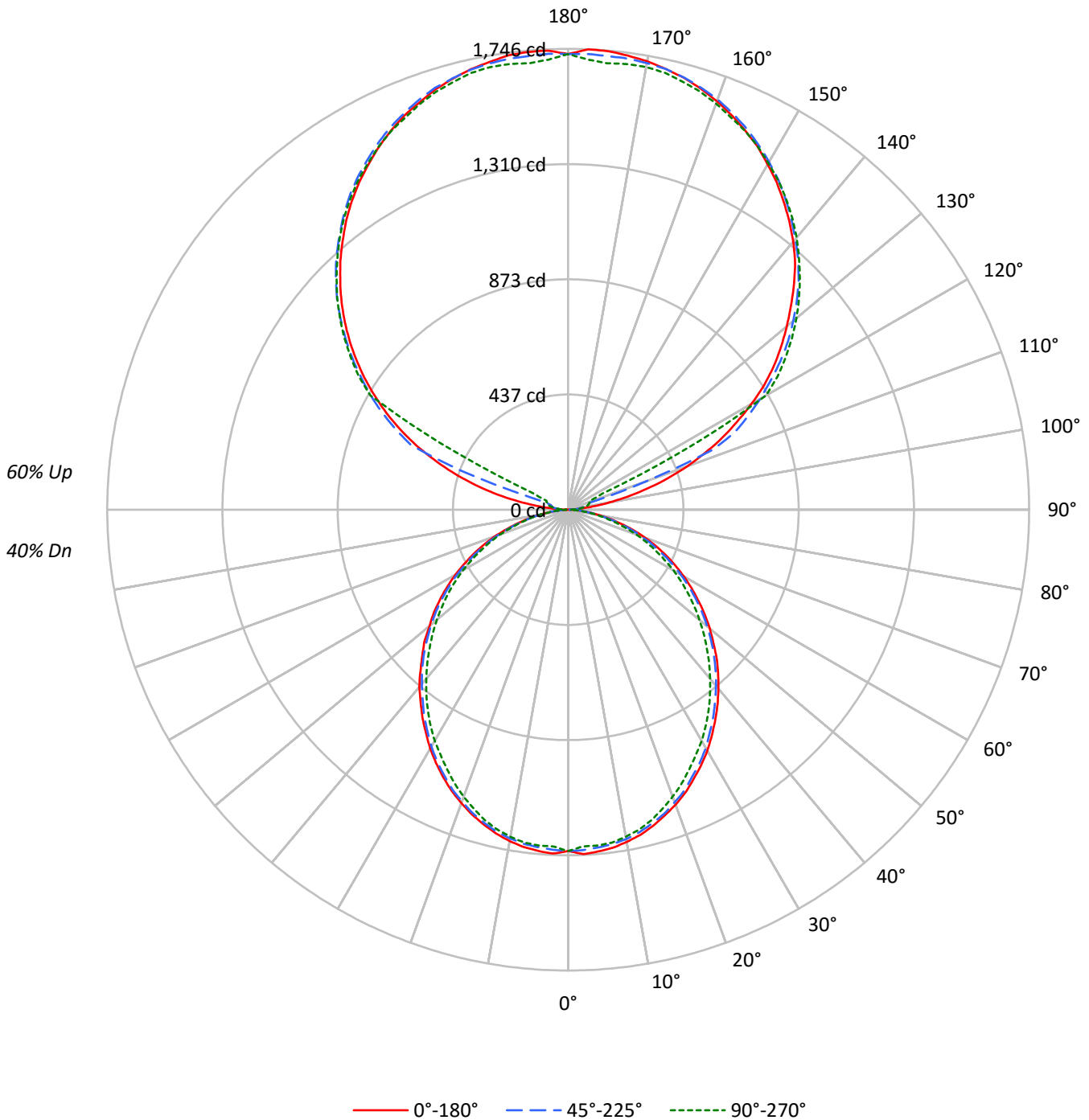
Input Watts (W): 80.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	40																				
1	96	91	88	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34																				
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	29																				
3	79	70	63	57	72	64	58	53	53	48	45	42	39	37	33	31	29	24																				
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21																				
5	67	55	47	41	60	51	44	38	42	37	33	34	30	27	26	24	22	18																				
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	45	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	53	40	33	28	48	37	30	26	31	26	22	25	21	19	20	17	15	13																				
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	14	11																				
10	46	34	27	22	42	31	25	20	26	21	18	21	18	15	17	14	12	10																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	20450	20450	20450
5°	20475	16940	20443
10°	20198	14465	20150
15°	19816	12442	19736
20°	19365	10706	19267
25°	18826	9240	18726
30°	18280	8031	18124
35°	17615	6950	17452
40°	16965	5977	16811
45°	16286	5114	16000
50°	15525	4338	15192
55°	14675	3632	14431
60°	13809	2978	13454
65°	12757	2339	12319
70°	11447	1758	10893
75°	9557	1184	8920
80°	7127	688	6468
85°	4427	272	3718



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	1.5
10°-20°	345.1	4.2
20°-30°	509.0	6.2
30°-40°	593.6	7.2
40°-50°	594.8	7.2
50°-60°	520.3	6.3
60°-70°	382.8	4.7
70°-80°	207.5	2.5
80°-90°	53.2	0.6
90°-100°	42.8	0.5
100°-110°	193.8	2.4
110°-120°	563.4	6.8
120°-130°	880.3	10.7
130°-140°	949.1	11.5
140°-150°	896.9	10.9
150°-160°	731.4	8.9
160°-170°	476.0	5.8
170°-180°	164.0	2.0
0°-30°	976.0	11.9
0°-40°	1569.6	19.1
0°-60°	2684.7	32.6
0°-90°	3328.2	40.5
90°-120°	800.1	9.7
90°-150°	3526.5	42.9
90°-180°	4898.0	59.5
0°-180°	8226.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1293	1293	1293	1293	1293	
5°	1300	1285	1277	1284	1298	123
15°	1240	1230	1218	1228	1235	350
25°	1125	1114	1085	1111	1119	519
35°	971	958	927	951	962	608
45°	795	781	743	773	781	612
55°	602	591	555	580	592	539
65°	408	392	364	380	394	404
75°	210	200	182	187	196	224
85°	50	47	40	41	42	56
90°	2	5	7	6	1	5
95°	42	34	39	40	73	59
105°	311	66	80	68	366	331
115°	643	698	142	721	688	634
125°	951	981	1005	997	975	848
135°	1210	1234	1241	1245	1221	932
145°	1423	1436	1438	1446	1428	891
155°	1585	1595	1584	1597	1586	731
165°	1694	1695	1678	1692	1690	478
175°	1744	1725	1698	1725	1741	166
180°	1726	1726	1726	1726	1726	



TEST NUMBER: P199411

CATALOG NUMBER: S122-DIP-U2-2-35-X-X0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1293	1293	1293	1293	1293	1293	1293	1293	1293
2.5°	1306	1288	1291	1287	1277	1286	1290	1287	1304
5°	1300	1282	1285	1280	1277	1280	1284	1280	1298
7.5°	1292	1272	1278	1275	1272	1274	1277	1270	1289
10°	1278	1258	1267	1261	1258	1260	1265	1255	1275
12.5°	1262	1242	1251	1244	1241	1241	1250	1239	1257
15°	1240	1224	1230	1223	1218	1221	1228	1220	1235
17.5°	1215	1201	1208	1197	1188	1195	1205	1196	1211
20°	1189	1173	1180	1165	1157	1163	1176	1169	1183
22.5°	1160	1145	1151	1131	1123	1128	1147	1140	1153
25°	1125	1113	1114	1094	1085	1091	1111	1107	1119
27.5°	1091	1079	1080	1057	1047	1055	1075	1072	1083
30°	1054	1043	1042	1019	1011	1016	1036	1036	1045
32.5°	1013	1004	999	978	970	976	993	996	1003
35°	971	965	958	938	927	935	951	955	962
37.5°	929	922	914	894	882	892	906	913	918
40°	885	880	871	851	836	846	862	870	877
42.5°	840	837	826	805	790	801	818	825	828
45°	795	791	781	759	743	755	773	780	781
47.5°	745	746	734	712	696	708	724	734	738
50°	700	701	687	665	649	658	677	687	685
52.5°	652	655	640	618	602	611	630	641	642
55°	602	607	591	569	555	564	580	593	592
57.5°	554	558	542	522	508	516	530	547	543
60°	506	510	493	473	461	465	481	495	493
62.5°	457	461	443	425	411	417	431	448	443
65°	408	411	392	376	364	370	380	398	394
67.5°	359	361	344	329	319	322	331	346	344
70°	310	312	296	282	273	276	283	297	295
72.5°	260	263	247	234	225	228	233	246	243
75°	210	212	200	190	182	183	187	197	196
77.5°	164	169	156	147	141	142	147	152	150
80°	119	125	116	109	104	103	107	111	108
82.5°	84	85	79	74	69	69	72	75	72
85°	50	52	47	43	40	39	41	44	42
87.5°	24	25	20	18	15	14	15	17	17
90°	2	5	5	6	7	7	6	6	1
92.5°	6	14	14	17	18	21	24	25	27
95°	42	30	34	37	39	42	40	37	73
97.5°	94	38	48	50	53	54	54	42	133
100°	157	44	57	65	67	67	61	94	205
102.5°	231	196	62	72	76	73	65	319	285
105°	311	353	66	76	80	78	68	393	366
107.5°	395	428	70	80	84	81	83	469	447
110°	479	507	314	83	87	83	435	546	528



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	559	588	590	88	89	95	647	624	609
115°	643	667	698	406	142	447	721	701	688
117.5°	720	743	767	714	544	777	792	777	764
120°	801	824	839	863	865	865	862	850	836
122.5°	881	896	908	932	940	931	929	918	907
125°	951	965	981	997	1005	996	997	983	975
127.5°	1017	1029	1050	1060	1068	1058	1062	1047	1041
130°	1081	1089	1113	1121	1128	1122	1125	1109	1104
132.5°	1144	1155	1175	1178	1186	1177	1188	1166	1164
135°	1210	1219	1234	1235	1241	1236	1245	1227	1221
137.5°	1272	1276	1289	1285	1294	1286	1299	1281	1277
140°	1326	1329	1338	1340	1346	1339	1349	1331	1329
142.5°	1376	1380	1388	1387	1394	1387	1399	1383	1381
145°	1423	1429	1436	1433	1438	1434	1446	1429	1428
147.5°	1470	1472	1482	1477	1480	1475	1488	1474	1472
150°	1511	1515	1521	1515	1516	1513	1526	1514	1512
152.5°	1552	1551	1560	1548	1553	1548	1563	1551	1551
155°	1585	1584	1595	1582	1584	1580	1597	1583	1586
157.5°	1618	1613	1626	1613	1609	1612	1625	1612	1618
160°	1647	1642	1654	1640	1637	1639	1653	1641	1643
162.5°	1672	1665	1676	1661	1661	1658	1676	1664	1670
165°	1694	1686	1695	1680	1678	1676	1692	1684	1690
167.5°	1710	1702	1710	1693	1695	1691	1707	1702	1709
170°	1725	1715	1718	1703	1703	1700	1717	1712	1722
172.5°	1735	1724	1724	1707	1703	1705	1723	1722	1736
175°	1744	1729	1725	1709	1698	1708	1725	1728	1741
177.5°	1746	1732	1728	1710	1707	1708	1729	1730	1741
180°	1726	1726	1726	1726	1726	1726	1726	1726	1726

(END OF REPORT)