

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: P243305

Luminaire Tested: **S123DR-H1165D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243305
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-49)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-H1165D930-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3680.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

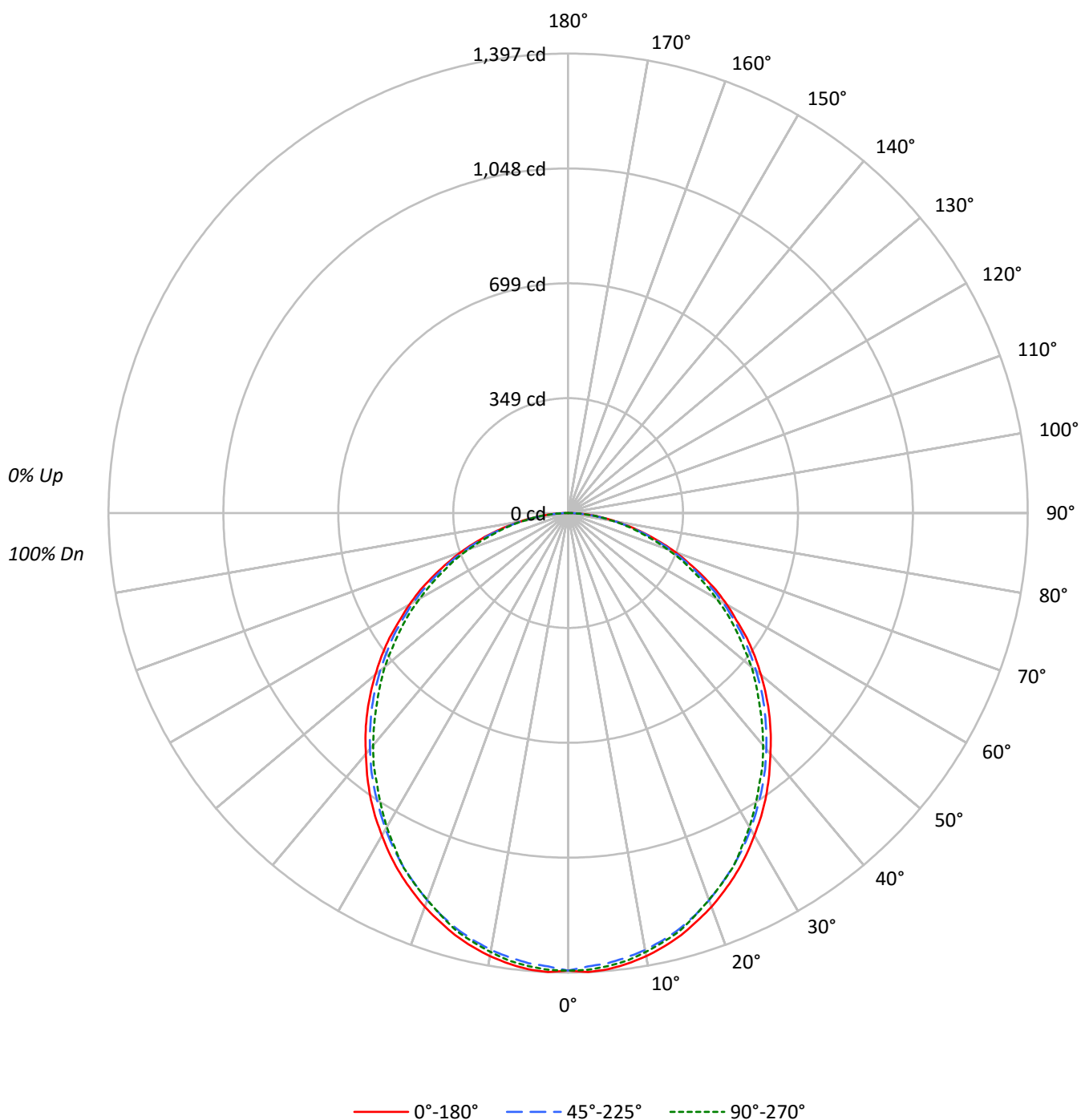
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	100	96	106	102	98	94		97	94	91		94	91	89		90	88	86
2	99	91	84	78	96	89	83	77		85	80	76		82	78	74		79	75	72
3	90	80	72	65	88	78	71	65		75	69	64		73	67	62		70	65	61
4	83	71	62	55	80	70	61	55		67	60	54		65	59	54		63	57	53
5	76	63	54	48	74	62	54	48		60	53	47		58	52	47		56	51	46
6	70	57	48	42	69	56	48	42		54	47	41		53	46	41		51	45	41
7	65	52	43	37	64	51	43	37		50	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	39	33		45	38	33		44	37	33		43	37	32
9	57	44	35	30	56	43	35	30		42	35	30		41	34	29		40	34	29
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16862	16862	16862
5°	16940	16717	16829
10°	16840	16600	16684
15°	16665	16420	16492
20°	16435	16154	16139
25°	16166	15859	15875
30°	15843	15537	15425
35°	15527	15188	14967
40°	15133	14825	14589
45°	14823	14470	14096
50°	14424	14056	13711
55°	14009	13645	13185
60°	13513	13149	12623
65°	12927	12531	12006
70°	12273	11869	11380
75°	11385	11062	10472
80°	10247	10010	9689
85°	9568	9096	8776

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	3.6
10°-20°	371.1	10.1
20°-30°	549.5	14.9
30°-40°	644.4	17.5
40°-50°	651.5	17.7
50°-60°	576.2	15.7
60°-70°	432.7	11.8
70°-80°	249.4	6.8
80°-90°	74.0	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1051.8	28.6
0°-40°	1696.3	46.1
0°-60°	2923.9	79.5
0°-90°	3680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3680.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1392	1386	1374	1385	1383	132
15°	1328	1321	1308	1318	1314	374
25°	1209	1200	1186	1192	1187	556
35°	1049	1040	1026	1023	1012	656
45°	865	858	844	833	822	666
55°	663	658	646	633	624	592
65°	451	447	437	426	419	447
75°	243	241	236	229	224	258
85°	69	68	65	64	63	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1391.1	1391.1	1391.1	1391.1	1391.1
2.5°	1396.8	1392.2	1379.6	1392.2	1389.9
5°	1392.2	1386.5	1373.9	1385.4	1383.1
7.5°	1381.9	1376.2	1362.4	1375.0	1372.7
10°	1368.2	1362.4	1348.7	1359.0	1355.5
12.5°	1349.8	1344.1	1330.3	1338.3	1336.0
15°	1328.0	1321.1	1308.5	1317.7	1314.2
17.5°	1301.6	1295.9	1282.1	1293.6	1283.3
20°	1274.1	1268.4	1252.3	1262.6	1251.2
22.5°	1242.0	1235.1	1219.1	1225.9	1220.2
25°	1208.7	1199.6	1185.8	1191.5	1187.0
27.5°	1172.0	1162.9	1149.1	1151.4	1143.4
30°	1131.9	1123.9	1110.1	1112.4	1102.1
32.5°	1091.8	1084.9	1067.7	1067.7	1057.4
35°	1049.3	1040.2	1026.4	1023.0	1011.5
37.5°	1003.5	995.4	982.8	977.1	970.2
40°	956.4	951.9	936.9	930.1	922.0
42.5°	911.7	903.7	891.1	881.9	872.7
45°	864.7	857.8	844.1	832.6	822.3
47.5°	815.4	809.7	795.9	783.3	775.2
50°	764.9	760.3	745.4	731.7	727.1
52.5°	715.6	709.9	695.0	682.4	673.2
55°	662.9	658.3	645.7	633.0	623.9
57.5°	606.7	606.7	592.9	581.4	574.6
60°	557.4	551.6	542.4	529.8	520.7
62.5°	505.7	502.3	489.7	477.1	470.2
65°	450.7	447.3	436.9	425.5	418.6
67.5°	396.8	395.7	386.5	377.3	372.7
70°	346.3	344.0	334.9	325.7	321.1
72.5°	294.7	292.4	284.4	276.4	270.6
75°	243.1	240.8	236.2	229.4	223.6
77.5°	192.7	192.7	186.9	184.6	182.3
80°	146.8	145.6	143.4	141.1	138.8
82.5°	105.5	104.4	102.1	100.9	100.9
85°	68.8	67.7	65.4	64.2	63.1
87.5°	35.6	33.3	32.1	29.8	28.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)