

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: P242616

Luminaire Tested: **S124DR-S1020D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242616
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-S1020D930-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3330.5 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

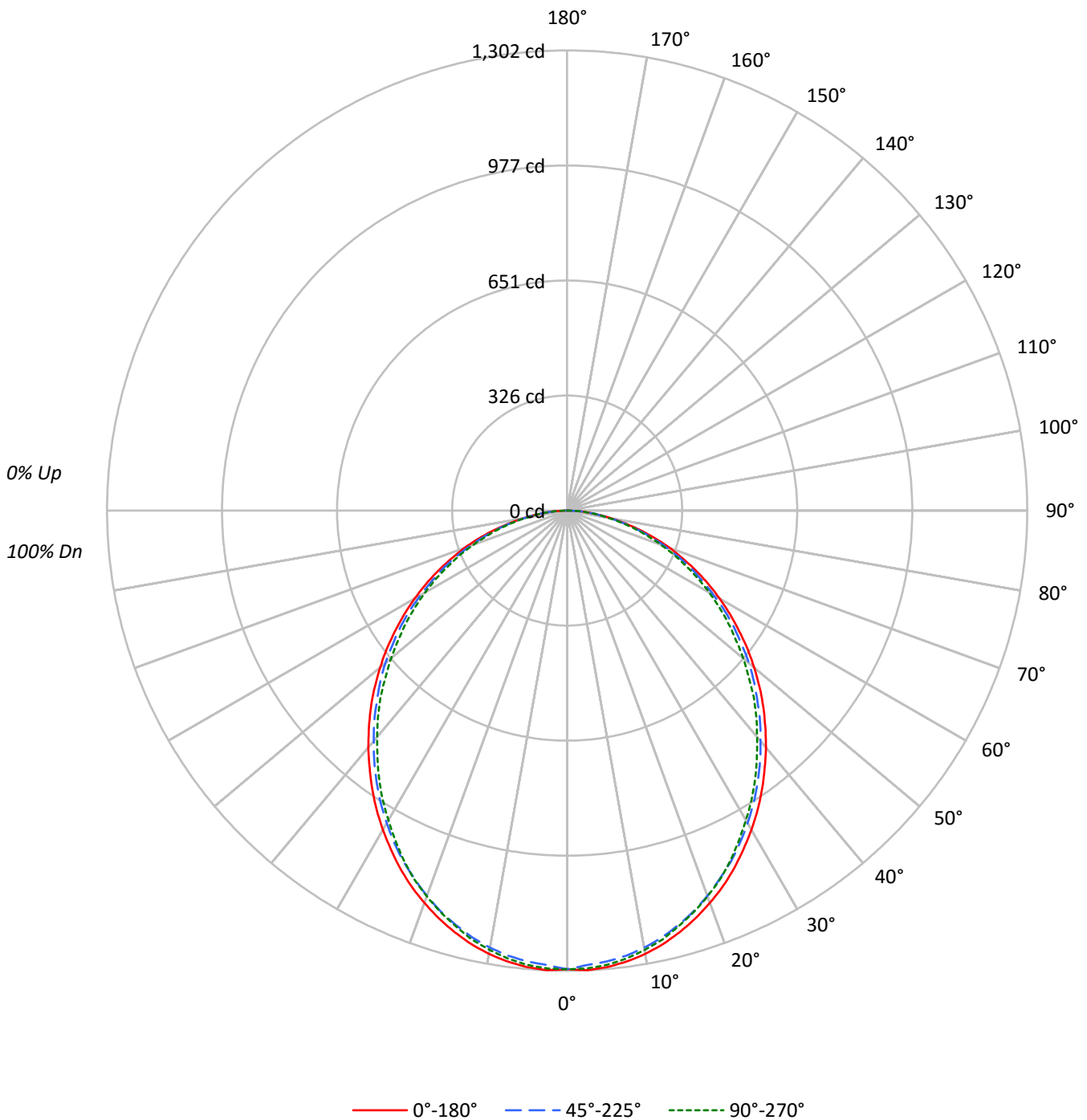
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11534	11534	11534
5°	11568	11429	11513
10°	11496	11337	11393
15°	11357	11175	11204
20°	11172	10976	10986
25°	10962	10748	10717
30°	10703	10480	10383
35°	10436	10199	10064
40°	10158	9881	9699
45°	9868	9568	9384
50°	9547	9289	9001
55°	9201	8926	8637
60°	8853	8521	8261
65°	8464	8136	7807
70°	8026	7620	7324
75°	7357	6999	6821
80°	6547	6281	6122
85°	5722	5518	5405



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.3	3.7
10°-20°	344.6	10.3
20°-30°	507.1	15.2
30°-40°	589.5	17.7
40°-50°	589.4	17.7
50°-60°	515.5	15.5
60°-70°	382.7	11.5
70°-80°	217.2	6.5
80°-90°	62.2	1.9
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°	974.0	29.2
0°-40°	1563.4	46.9
0°-60°	2668.4	80.1
0°-90°	3330.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3330.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1296	1292	1281	1292	1290	123
15°	1234	1230	1214	1221	1218	348
25°	1118	1110	1096	1097	1093	514
35°	962	954	940	933	927	601
45°	785	778	761	750	746	605
55°	594	591	576	564	557	532
65°	402	397	387	376	371	398
75°	214	209	204	200	199	227
85°	56	56	54	54	53	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1297.6	1297.6	1297.6	1297.6	1297.6
2.5°	1301.7	1298.6	1287.2	1297.6	1296.5
5°	1296.5	1292.4	1280.9	1292.4	1290.3
7.5°	1287.2	1283.0	1270.5	1279.9	1278.8
10°	1273.6	1269.5	1256.0	1264.3	1262.2
12.5°	1256.0	1251.8	1237.3	1246.6	1243.5
15°	1234.1	1230.0	1214.4	1220.6	1217.5
17.5°	1209.2	1204.0	1189.4	1193.6	1191.5
20°	1181.1	1175.9	1160.3	1163.4	1161.4
22.5°	1151.0	1143.7	1128.1	1134.3	1130.2
25°	1117.7	1110.4	1095.9	1096.9	1092.7
27.5°	1080.3	1073.0	1059.5	1057.4	1052.2
30°	1042.8	1034.5	1021.0	1016.8	1011.6
32.5°	1003.3	996.0	981.5	976.3	971.1
35°	961.7	954.5	939.9	932.6	927.4
37.5°	918.1	911.8	896.2	889.0	881.7
40°	875.4	867.1	851.5	841.1	835.9
42.5°	829.7	825.5	807.9	795.4	792.3
45°	785.0	777.7	761.1	749.6	746.5
47.5°	738.2	733.0	717.4	704.9	696.6
50°	690.4	686.2	671.7	657.1	650.9
52.5°	643.6	638.4	622.8	610.3	602.0
55°	593.7	590.6	576.0	563.5	557.3
57.5°	546.9	543.8	529.2	516.7	510.5
60°	498.0	492.8	479.3	469.9	464.7
62.5°	450.2	446.0	431.5	423.2	418.0
65°	402.4	397.2	386.8	376.4	371.2
67.5°	353.5	349.3	338.9	328.5	327.5
70°	308.8	301.5	293.2	284.9	281.8
72.5°	261.0	253.7	247.5	241.2	238.1
75°	214.2	209.0	203.8	199.6	198.6
77.5°	168.4	166.4	161.2	160.1	157.0
80°	127.9	124.8	122.7	120.6	119.6
82.5°	88.4	87.3	87.3	86.3	85.3
85°	56.1	56.1	54.1	54.1	53.0
87.5°	27.0	26.0	25.0	25.0	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)