

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: P334253

Luminaire Tested: **S124RDW-S1020D930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334253  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124RDW-S1020D930-4F0-1E-UDD-F  
Description: DEFINE 4 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1020 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3137.5 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

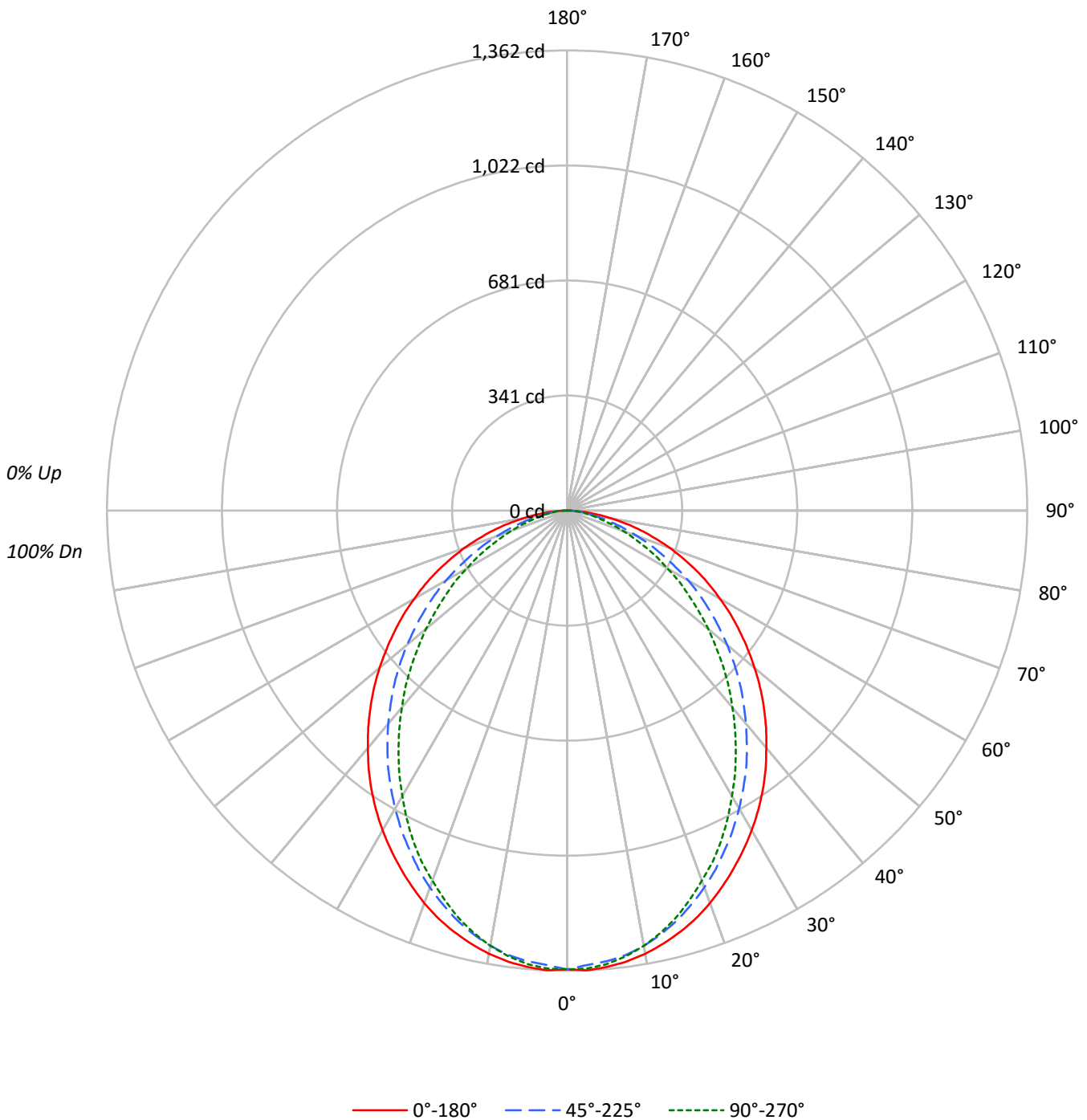
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10962	10962	10962
5°	10987	10852	10920
10°	10918	10722	10722
15°	10792	10497	10419
20°	10620	10200	10013
25°	10400	9853	9604
30°	10186	9489	9091
35°	9950	9109	8576
40°	9664	8677	8021
45°	9401	8250	7454
50°	9102	7757	6855
55°	8780	7244	6204
60°	8427	6681	5540
65°	8103	5979	4886
70°	7631	5202	4147
75°	7037	4314	3372
80°	6137	3287	3092
85°	5196	2983	2797



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.7	4.1
10°-20°	356.0	11.3
20°-30°	514.0	16.4
30°-40°	582.5	18.6
40°-50°	562.4	17.9
50°-60°	467.6	14.9
60°-70°	322.7	10.3
70°-80°	163.1	5.2
80°-90°	41.4	1.3
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°	997.7	31.8
0°-40°	1580.2	50.4
0°-60°	2610.2	83.2
0°-90°	3137.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3137.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1356	1352	1339	1350	1348	129
15°	1291	1282	1256	1254	1247	364
25°	1168	1149	1106	1089	1078	538
35°	1010	976	924	889	870	631
45°	823	785	723	672	653	635
55°	624	582	515	461	441	558
65°	424	380	313	268	256	419
75°	226	187	138	114	108	238
85°	56	35	32	30	30	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1357.9	1357.9	1357.9	1357.9	1357.9
2.5°	1362.0	1357.9	1346.4	1357.9	1356.8
5°	1355.8	1351.6	1339.1	1349.5	1347.5
7.5°	1346.4	1342.3	1326.7	1333.9	1330.8
10°	1331.9	1326.7	1308.0	1312.1	1308.0
12.5°	1313.1	1306.9	1284.0	1286.1	1279.9
15°	1291.3	1282.0	1256.0	1253.9	1246.6
17.5°	1266.4	1252.8	1222.7	1217.5	1207.1
20°	1236.2	1222.7	1187.3	1179.0	1165.5
22.5°	1202.9	1187.3	1148.9	1135.4	1125.0
25°	1167.6	1148.9	1106.2	1088.6	1078.2
27.5°	1131.2	1108.3	1063.6	1042.8	1028.3
30°	1092.7	1066.7	1017.9	991.9	975.2
32.5°	1052.2	1022.0	971.1	939.9	924.3
35°	1009.6	976.3	924.3	888.9	870.2
37.5°	964.8	930.5	873.4	834.9	816.2
40°	917.0	882.7	823.4	779.8	761.1
42.5°	871.3	834.9	772.5	727.8	708.0
45°	823.4	785.0	722.6	671.7	652.9
47.5°	774.6	735.1	670.6	617.6	596.8
50°	724.7	684.1	617.6	565.6	545.8
52.5°	673.7	634.2	565.6	512.6	491.8
55°	623.8	582.2	514.7	460.6	440.8
57.5°	575.0	531.3	464.7	409.6	395.1
60°	521.9	480.3	413.8	359.7	343.1
62.5°	474.1	430.4	361.8	313.0	300.5
65°	424.2	379.5	313.0	268.2	255.8
67.5°	372.2	329.6	267.2	227.7	213.1
70°	323.3	279.7	220.4	186.1	175.7
72.5°	271.4	232.9	177.8	149.7	140.4
75°	225.6	187.1	138.3	114.4	108.1
77.5°	177.8	144.5	102.9	86.3	84.2
80°	132.0	101.9	70.7	67.6	66.5
82.5°	92.5	65.5	50.9	48.9	47.8
85°	56.1	35.4	32.2	30.2	30.2
87.5°	23.9	15.6	14.6	13.5	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)