

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: P33914

Luminaire Tested: **S123RDW-135-0048-1D-UDD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P33914  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDW-135-0048-1D-UDD-1-W  
Description: NEORAY DIRECT- INDIRECT 3" FIXTURE WITH REGRESSED DIFFUSE  
LENS.LL1  
Light Source: [117] NICHIA 3500K LED  
Nichia 757D  
Ballast/Driver: [1] OSRAM SYLVANIA ELECTRONIC DRIVER  
OT50WPRG1400C

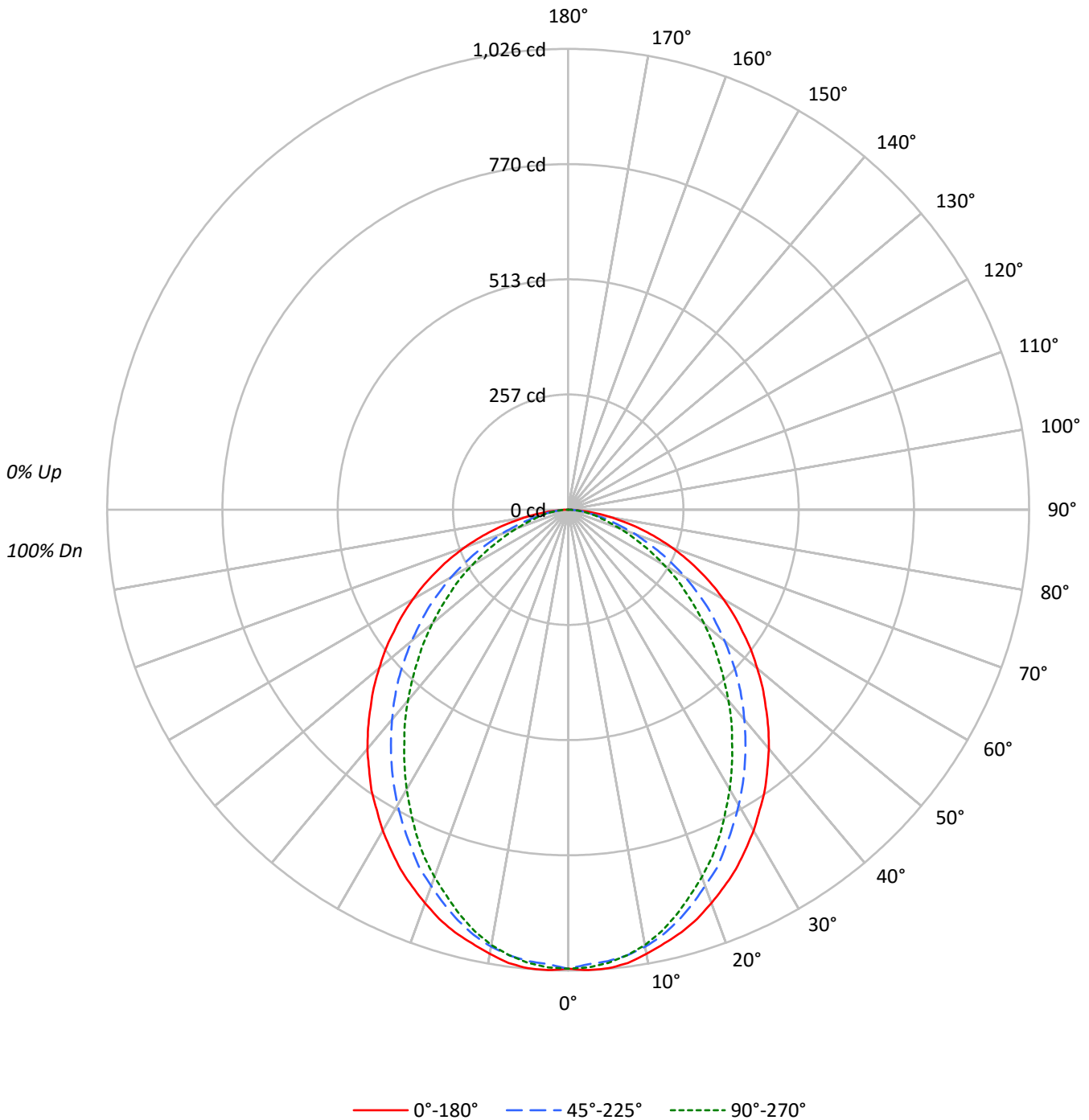
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2327.0 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.07 / 1.23  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.8  
Input Voltage (V): 120.08  
Input Current (A<sub>in</sub>): 0.2332  
Voltage Rise (V): NR  
Power Factor: 0.9971  
Total Harmonic Distortion (THDi): 7.16  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: HR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

TEST NUMBER: P33914

CATALOG NUMBER: S123RDW-135-0048-1D-UDD-1-W

### Luminous Intensity Polar Plot





TEST NUMBER: P33914

CATALOG NUMBER: S123RDW-135-0048-1D-UDD-1-W

**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	93	90	91	89	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28

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

	0°	45°	90°
0°	11001	11001	11001
5°	11075	10902	10945
10°	10974	10799	10755
15°	10854	10553	10397
20°	10676	10206	9966
25°	10487	9834	9489
30°	10254	9434	8937
35°	10026	9014	8357
40°	9766	8571	7798
45°	9468	8129	7200
50°	9193	7603	6615
55°	8895	7112	5968
60°	8590	6480	5317
65°	8201	5756	4559
70°	7711	4973	3840
75°	6987	3993	3202
80°	6013	3223	2975
85°	4693	2717	2594



TEST NUMBER: P33914

CATALOG NUMBER: S123RDW-135-0048-1D-UDD-1-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.3	4.1
10°-20°	268.0	11.5
20°-30°	385.0	16.5
30°-40°	433.4	18.6
40°-50°	416.8	17.9
50°-60°	345.5	14.8
60°-70°	235.7	10.1
70°-80°	117.1	5.0
80°-90°	29.1	1.2
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°	749.3	32.2
0°-40°	1182.7	50.8
0°-60°	1945.0	83.6
0°-90°	2327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2327.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1025	1021	1009	1016	1013	97
15°	974	965	947	944	933	274
25°	883	868	828	811	799	406
35°	763	734	686	653	636	476
45°	622	589	534	490	473	481
55°	474	437	379	334	318	425
65°	322	282	226	191	179	319
75°	168	135	96	80	77	178
85°	38	25	22	22	21	46
90°	0	0	0	0	0	



TEST NUMBER: P33914

CATALOG NUMBER: S123RDW-135-0048-1D-UDD-1-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1022	1022	1022	1022	1022
2.5°	1026	1022	1013	1022	1020
5°	1025	1021	1009	1016	1013
7.5°	1018	1013	1001	1005	1001
10°	1004	1001	988	990	984
12.5°	989	984	970	970	961
15°	974	965	947	944	933
17.5°	955	949	920	915	901
20°	932	921	891	882	870
22.5°	908	895	864	849	837
25°	883	868	828	811	799
27.5°	854	837	794	774	758
30°	825	804	759	735	719
32.5°	793	771	723	693	678
35°	763	734	686	653	636
37.5°	728	699	648	611	597
40°	695	664	610	571	555
42.5°	659	626	572	531	513
45°	622	589	534	490	473
47.5°	587	552	494	451	435
50°	549	515	454	411	395
52.5°	513	475	415	372	356
55°	474	437	379	334	318
57.5°	438	399	338	296	285
60°	399	359	301	261	247
62.5°	361	319	262	225	213
65°	322	282	226	191	179
67.5°	284	245	189	160	149
70°	245	207	158	130	122
72.5°	206	171	125	103	97
75°	168	135	96	80	77
77.5°	130	103	71	63	62
80°	97	71	52	48	48
82.5°	65	44	36	35	34
85°	38	25	22	22	21
87.5°	16	10	10	10	9
90°	0	0	0	0	0

(END OF REPORT)