

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: P33915

Luminaire Tested: **S124DS-135-SR0048-1D-UDD-1-W**

Test Date: 02/23/15

**Test Information**

Test Method: LM-79-08  
Report Number: P33915  
Test Lab: INNOVATION CENTER-P3  
Test Date: 02/23/15  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DS-135-SR0048-1D-UDD-1-W  
Description: NEORAY DIRECT- INDIRECT 4" FIXTURE WITH A FLUSH DIFFUSE LENS.LL1  
Light Source: [117] NICHIA 3500K LED  
Nichia 757D  
Ballast/Driver: [1] OSRAM SYLVANIA ELECTRONIC DRIVER  
OT50WPRG1400C

**Summary**

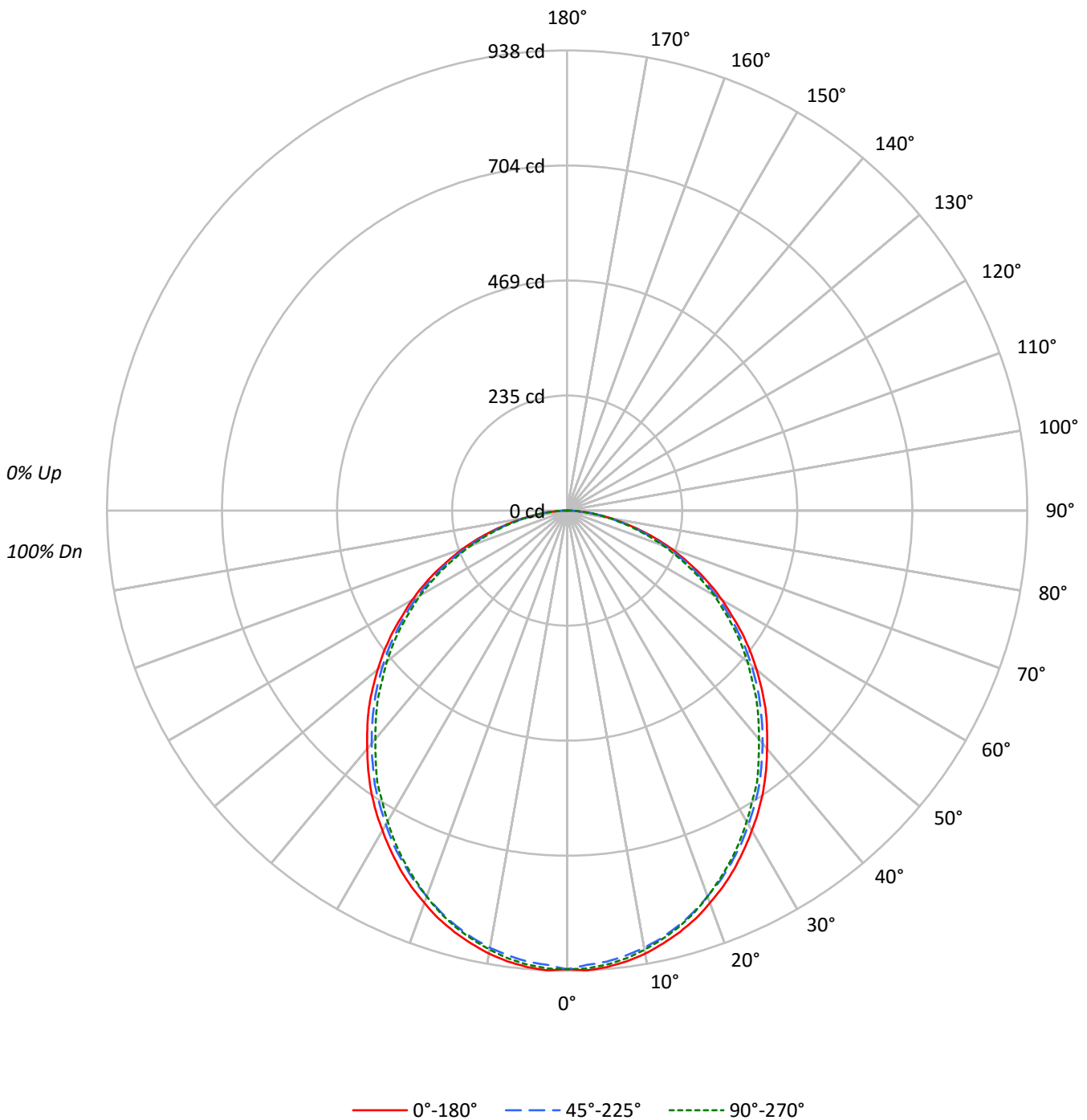
Lumens per Lamp: N/A  
Luminaire Lumens: 2422.4 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.9  
Input Voltage (V): 120.03  
Input Current (A<sub>in</sub>): 0.2336  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 7.47  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: HR  
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	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	7548	7548	7548
5°	7569	7480	7528
10°	7517	7419	7452
15°	7430	7321	7346
20°	7311	7191	7191
25°	7179	7055	7019
30°	7019	6889	6824
35°	6869	6731	6652
40°	6681	6534	6407
45°	6530	6348	6234
50°	6330	6154	6028
55°	6123	5940	5813
60°	5893	5716	5586
65°	5635	5444	5272
70°	5311	5075	4910
75°	4803	4585	4460
80°	4138	4045	3952
85°	3427	3335	3335



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.1	3.6
10°-20°	248.4	10.3
20°-30°	366.4	15.1
30°-40°	427.8	17.7
40°-50°	430.3	17.8
50°-60°	378.9	15.6
60°-70°	282.5	11.7
70°-80°	157.5	6.5
80°-90°	42.5	1.8
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°	702.9	29.0
0°-40°	1130.7	46.7
0°-60°	1939.9	80.1
0°-90°	2422.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2422.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	934	931	923	930	929	89
15°	889	886	876	880	879	251
25°	806	801	792	792	788	371
35°	697	693	683	678	675	436
45°	572	568	556	550	546	440
55°	435	433	422	416	413	388
65°	295	293	285	279	276	291
75°	154	151	147	144	143	164
85°	37	36	36	36	36	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	935	935	935	935	935
2.5°	938	935	927	935	934
5°	934	931	923	930	929
7.5°	927	924	915	922	921
10°	917	914	905	912	909
12.5°	904	901	892	897	895
15°	889	886	876	880	879
17.5°	872	868	858	863	860
20°	851	848	837	841	837
22.5°	830	826	816	817	813
25°	806	801	792	792	788
27.5°	780	777	767	766	761
30°	753	750	739	737	732
32.5°	726	722	711	708	702
35°	697	693	683	678	675
37.5°	666	661	651	645	641
40°	634	632	620	615	608
42.5°	603	599	588	582	577
45°	572	568	556	550	546
47.5°	538	533	524	517	511
50°	504	501	490	483	480
52.5°	470	467	457	450	447
55°	435	433	422	416	413
57.5°	398	399	388	382	378
60°	365	363	354	349	346
62.5°	330	328	319	313	310
65°	295	293	285	279	276
67.5°	258	257	250	246	241
70°	225	221	215	211	208
72.5°	190	185	181	179	175
75°	154	151	147	144	143
77.5°	120	120	116	114	113
80°	89	88	87	86	85
82.5°	61	60	60	60	61
85°	37	36	36	36	36
87.5°	16	17	16	16	16
90°	0	0	0	0	0

(END OF REPORT)