

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: P231756

Luminaire Tested: **S124-RDR-2-30-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33917)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124-RDR-2-30-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3910.4 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.31' x L: 3.92' x H: 0')
CIE Type: Direct

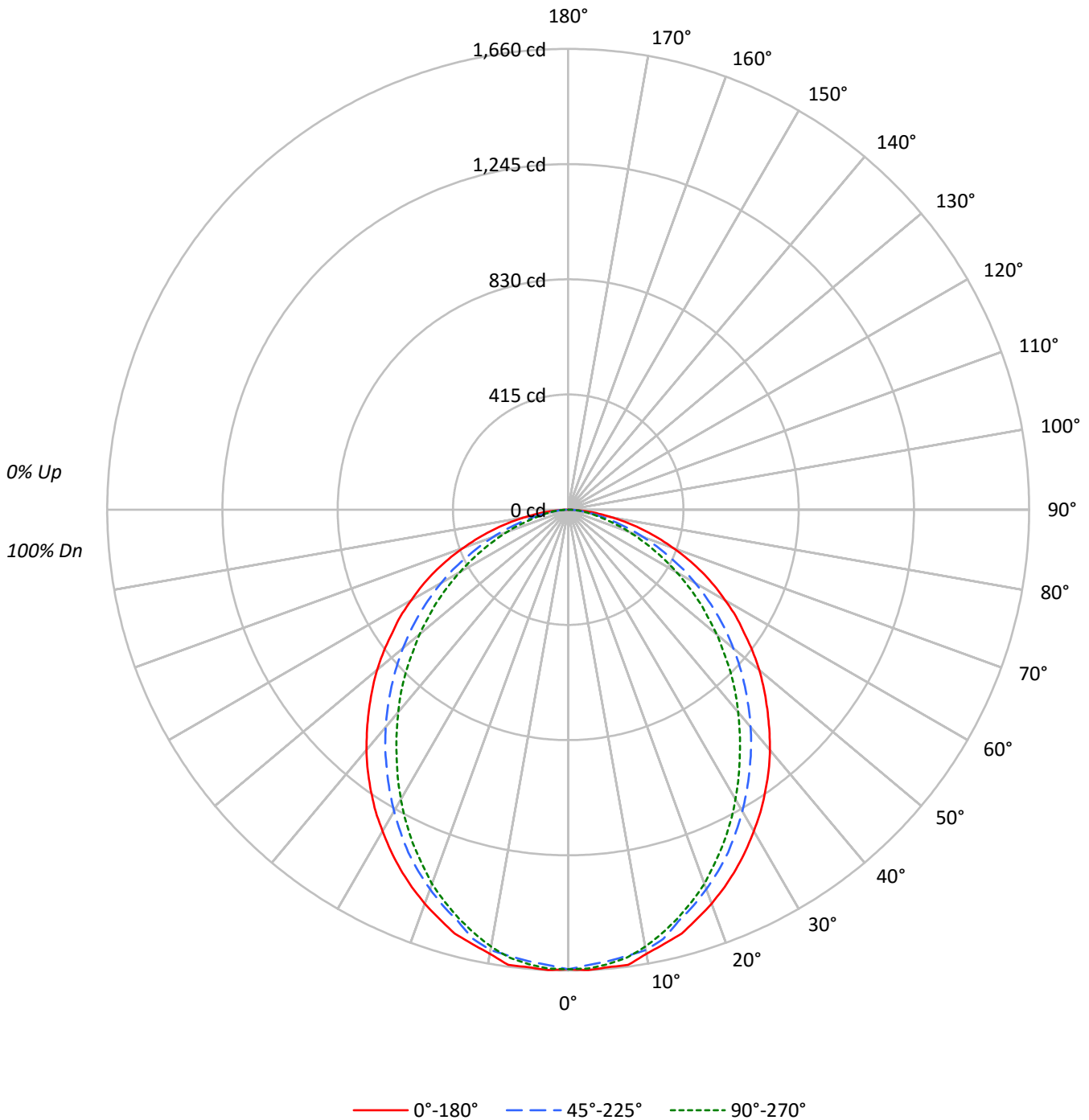
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	31	41	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14833	14833	14833
5°	14877	14689	14782
10°	14776	14654	14544
15°	14663	14232	14135
20°	14401	13872	13673
25°	14132	13466	13096
30°	13830	12978	12467
35°	13540	12459	11789
40°	13218	11958	11135
45°	12841	11399	10470
50°	12518	10829	9744
55°	12089	10195	8980
60°	11695	9470	8073
65°	11265	8536	7141
70°	10508	7530	6117
75°	9638	6218	4871
80°	8339	4789	4324
85°	6775	4154	3845



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	4.0
10°-20°	436.0	11.1
20°-30°	631.4	16.1
30°-40°	719.0	18.4
40°-50°	701.6	17.9
50°-60°	592.4	15.1
60°-70°	414.1	10.6
70°-80°	208.3	5.3
80°-90°	51.5	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°	1223.4	31.3
0°-40°	1942.4	49.7
0°-60°	3236.4	82.8
0°-90°	3910.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3910.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1655	1655	1655	1655	1655	
5°	1654	1648	1633	1646	1643	157
15°	1581	1569	1534	1534	1524	444
25°	1429	1408	1362	1340	1325	658
35°	1238	1202	1139	1097	1078	774
45°	1013	974	900	846	826	783
55°	774	729	653	594	575	694
65°	531	479	403	355	337	524
75°	278	235	180	150	141	295
85°	66	43	40	39	37	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1655.4	1655.4	1655.4	1655.4	1655.4
2.5°	1659.9	1656.9	1641.9	1656.9	1653.9
5°	1653.9	1647.9	1633.0	1646.4	1643.4
7.5°	1653.9	1646.4	1621.0	1630.0	1627.0
10°	1624.0	1628.5	1610.5	1601.5	1598.5
12.5°	1601.5	1594.0	1583.6	1570.1	1562.6
15°	1580.6	1568.6	1534.2	1534.2	1523.7
17.5°	1544.6	1535.7	1496.7	1496.7	1480.3
20°	1510.2	1496.7	1454.8	1454.8	1433.9
22.5°	1471.3	1456.3	1409.9	1405.4	1378.5
25°	1429.4	1408.4	1362.0	1339.6	1324.6
27.5°	1384.5	1359.0	1308.2	1279.7	1266.2
30°	1336.6	1309.7	1254.3	1219.9	1204.9
32.5°	1290.2	1258.8	1197.4	1160.0	1142.0
35°	1237.8	1201.9	1139.0	1097.1	1077.7
37.5°	1185.4	1149.5	1082.1	1034.3	1014.8
40°	1130.0	1089.6	1022.3	972.9	951.9
42.5°	1071.7	1031.3	960.9	908.5	890.6
45°	1013.3	974.4	899.5	845.7	826.2
47.5°	956.4	913.0	838.2	781.3	758.9
50°	898.0	853.1	776.8	719.9	699.0
52.5°	836.7	791.8	715.4	657.1	633.1
55°	773.8	728.9	652.6	594.2	574.8
57.5°	716.9	666.1	589.7	532.8	511.9
60°	652.6	601.7	528.4	471.5	450.5
62.5°	592.7	540.3	468.5	413.1	392.1
65°	531.3	479.0	402.6	354.7	336.8
67.5°	467.0	417.6	344.3	299.3	282.9
70°	401.1	353.2	287.4	247.0	233.5
72.5°	339.8	293.4	232.0	196.1	187.1
75°	278.4	235.0	179.6	149.7	140.7
77.5°	218.5	179.6	133.2	110.8	107.8
80°	161.6	128.7	92.8	83.8	83.8
82.5°	110.8	80.8	64.4	61.4	61.4
85°	65.9	43.4	40.4	38.9	37.4
87.5°	28.4	19.5	18.0	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)