

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: P231770

Luminaire Tested: **S125-RDR-2-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231770  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33920)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-RDR-2-40-X-0048-1-U-DD-1-W  
Description: DEFINE 5 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3982.2 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.11 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.92' x H: 0')  
CIE Type: Direct

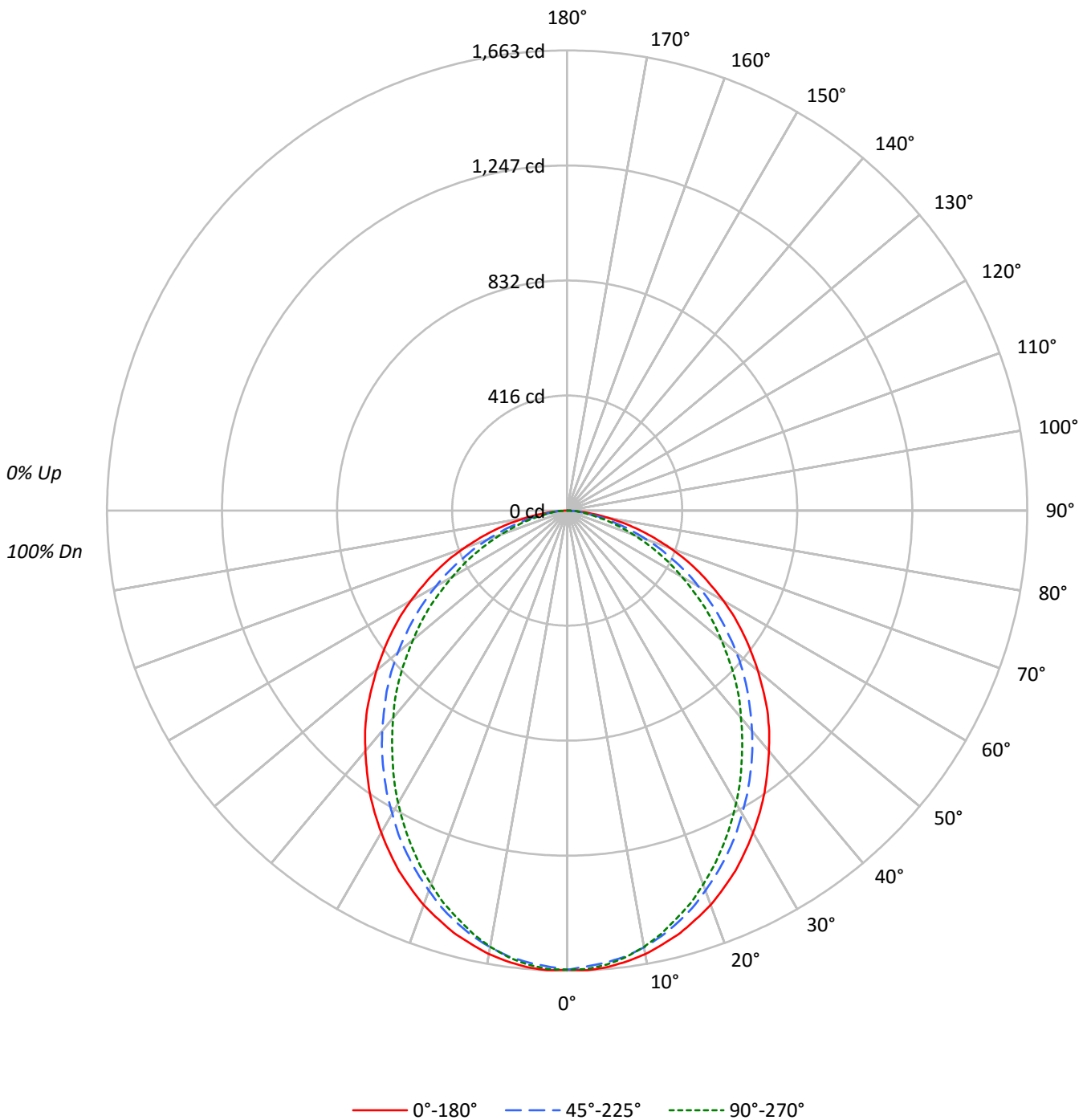
Input Watts (W): 42.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	33	28	27

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

	0°	45°	90°
0°	11694	11694	11694
5°	11717	11593	11649
10°	11648	11466	11454
15°	11528	11250	11135
20°	11374	10957	10779
25°	11176	10646	10374
30°	10934	10289	9940
35°	10701	9936	9458
40°	10435	9559	8990
45°	10198	9186	8537
50°	9862	8766	7966
55°	9551	8284	7427
60°	9190	7736	6752
65°	8782	7063	6084
70°	8140	6276	5262
75°	7343	5271	4405
80°	6115	4058	3413
85°	4358	3339	3210



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.1	3.9
10°-20°	436.6	11.0
20°-30°	634.9	15.9
30°-40°	728.1	18.3
40°-50°	716.5	18.0
50°-60°	609.0	15.3
60°-70°	430.5	10.8
70°-80°	218.2	5.5
80°-90°	52.1	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°	1227.7	30.8
0°-40°	1955.9	49.1
0°-60°	3281.4	82.4
0°-90°	3982.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3982.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1660	1660	1660	1660	1660	
5°	1656	1652	1639	1648	1647	157
15°	1580	1571	1542	1536	1526	445
25°	1437	1414	1369	1349	1334	661
35°	1244	1212	1155	1120	1100	777
45°	1023	984	922	871	857	788
55°	777	735	674	624	604	695
65°	527	484	424	382	365	520
75°	270	238	194	168	162	285
85°	54	46	41	40	40	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1659.5	1659.5	1659.5	1659.5	1659.5
2.5°	1662.7	1659.5	1648.4	1659.5	1657.9
5°	1656.4	1651.6	1638.9	1648.4	1646.8
7.5°	1643.7	1638.9	1624.6	1631.0	1627.8
10°	1627.8	1621.5	1602.4	1605.6	1600.8
12.5°	1604.0	1597.7	1575.4	1573.9	1567.5
15°	1580.2	1570.7	1542.1	1535.8	1526.3
17.5°	1548.5	1537.4	1505.6	1496.1	1486.6
20°	1516.7	1500.9	1461.2	1451.7	1437.4
22.5°	1477.1	1458.0	1416.8	1402.5	1388.2
25°	1437.4	1413.6	1369.2	1348.6	1334.3
27.5°	1391.4	1369.2	1320.0	1293.0	1278.8
30°	1343.8	1316.8	1264.5	1237.5	1221.6
32.5°	1294.6	1264.5	1212.1	1177.2	1162.9
35°	1243.9	1212.1	1155.0	1120.1	1099.5
37.5°	1188.3	1155.0	1099.5	1059.8	1039.2
40°	1134.4	1099.5	1039.2	997.9	977.3
42.5°	1080.4	1044.0	978.9	936.1	920.2
45°	1023.3	983.7	921.8	871.0	856.7
47.5°	959.9	923.4	861.5	812.3	790.1
50°	899.6	861.5	799.6	750.4	726.6
52.5°	837.7	801.2	734.6	687.0	667.9
55°	777.4	734.6	674.3	623.5	604.5
57.5°	717.1	672.7	610.8	563.2	539.4
60°	652.1	609.2	548.9	501.4	479.1
62.5°	587.0	547.4	488.7	442.6	423.6
65°	526.7	483.9	423.6	382.4	364.9
67.5°	463.3	425.2	364.9	325.2	309.4
70°	395.1	361.7	304.6	268.1	255.4
72.5°	331.6	298.3	249.1	217.4	206.3
75°	269.7	238.0	193.6	168.2	161.8
77.5°	207.8	182.5	144.4	123.8	119.0
80°	150.7	133.3	100.0	88.8	84.1
82.5°	98.4	84.1	66.6	63.5	61.9
85°	53.9	46.0	41.3	39.7	39.7
87.5°	19.0	20.6	19.0	19.0	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)