

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: P333913

Luminaire Tested: **SA2XXRDP-C865D940-4F0-1E-UDD-F**

Issue Date: 10/11/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P333913  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 10/11/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDP-C865D940-4F0-1E-UDD-F  
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 865 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

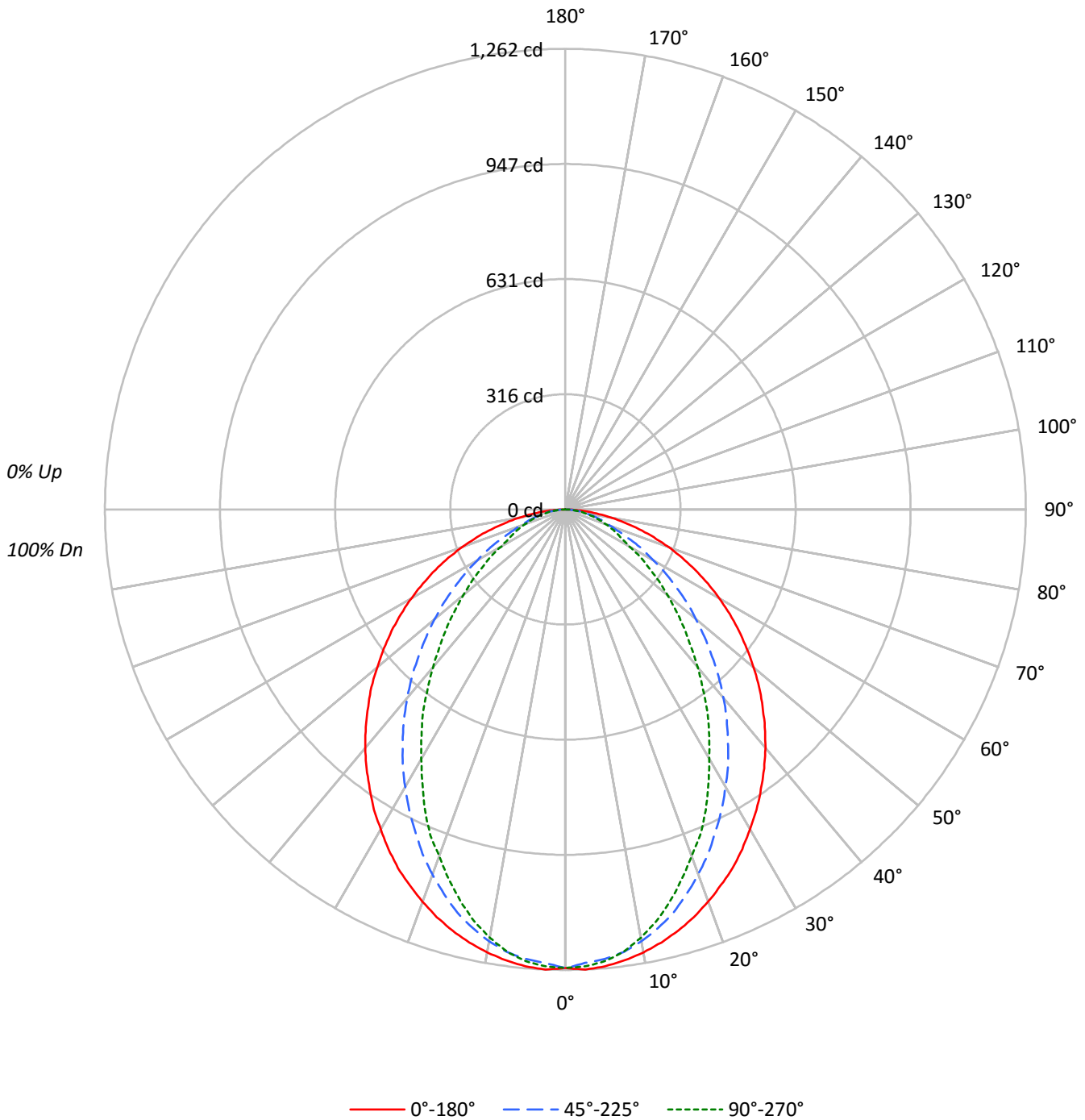
Lumens per Lamp: N/A  
Luminaire Lumens: 2584.3 lumens  
Efficiency: N/A  
Efficacy: 74.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.8  
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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

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

	0°	45°	90°
0°	20287	20287	20287
5°	20365	20034	20144
10°	20210	19707	19538
15°	19977	19122	18571
20°	19656	18289	17369
25°	19326	17341	16206
30°	18869	16367	14714
35°	18423	15309	13403
40°	17976	14212	11887
45°	17449	12983	10515
50°	16910	11740	9168
55°	16358	10404	7873
60°	15716	8996	6536
65°	14988	7561	5952
70°	14120	6227	5476
75°	13050	5677	5109
80°	11520	5077	4649
85°	9059	4001	4001



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.8	4.6
10°-20°	323.3	12.5
20°-30°	453.9	17.6
30°-40°	494.8	19.1
40°-50°	454.7	17.6
50°-60°	357.1	13.8
60°-70°	232.5	9.0
70°-80°	119.7	4.6
80°-90°	30.6	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°	895.0	34.6
0°-40°	1389.7	53.8
0°-60°	2201.6	85.2
0°-90°	2584.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2584.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1256	1251	1236	1246	1243	119
15°	1195	1183	1144	1122	1111	337
25°	1085	1048	973	927	910	499
35°	935	877	777	705	680	585
45°	764	688	569	488	460	590
55°	581	492	370	301	280	519
65°	392	300	198	159	156	389
75°	209	130	91	83	82	221
85°	49	25	22	22	22	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1256.5	1256.5	1256.5	1256.5	1256.5
2.5°	1262.2	1256.5	1244.0	1255.4	1253.1
5°	1256.5	1250.9	1236.1	1246.3	1242.9
7.5°	1246.3	1239.5	1223.6	1228.1	1222.4
10°	1232.7	1224.7	1202.0	1198.6	1191.7
12.5°	1215.6	1205.4	1174.7	1167.9	1155.3
15°	1195.1	1182.6	1144.0	1122.4	1111.0
17.5°	1171.3	1153.1	1105.3	1080.3	1062.1
20°	1144.0	1121.2	1064.4	1035.9	1010.9
22.5°	1114.4	1088.3	1022.3	983.6	966.6
25°	1084.8	1048.5	973.4	926.8	909.7
27.5°	1049.6	1010.9	927.9	874.5	848.3
30°	1012.1	968.9	877.9	819.9	789.2
32.5°	975.7	923.4	830.1	761.9	733.5
35°	934.7	876.7	776.7	705.0	680.0
37.5°	894.9	832.4	726.6	648.2	619.7
40°	852.9	784.6	674.3	593.6	564.0
42.5°	809.6	736.9	622.0	537.9	509.4
45°	764.2	688.0	568.6	487.8	460.5
47.5°	721.0	640.2	517.4	436.7	411.6
50°	673.2	592.5	467.4	388.9	365.0
52.5°	626.6	541.3	419.6	344.6	323.0
55°	581.1	492.4	369.6	301.3	279.7
57.5°	534.5	443.5	325.2	261.5	243.3
60°	486.7	395.7	278.6	220.6	202.4
62.5°	440.1	349.1	238.8	184.2	175.1
65°	392.3	300.2	197.9	159.2	155.8
67.5°	346.8	254.7	159.2	139.9	136.5
70°	299.1	210.4	131.9	120.5	116.0
72.5°	253.6	169.4	110.3	101.2	98.9
75°	209.2	129.6	91.0	83.0	81.9
77.5°	164.9	92.1	71.6	67.1	64.8
80°	123.9	66.0	54.6	50.0	50.0
82.5°	86.4	44.3	37.5	35.3	35.3
85°	48.9	25.0	21.6	21.6	21.6
87.5°	18.2	9.1	9.1	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)