

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: 9057.0

Luminaire Tested: **16DIP/3 (BTM LAMP ONLY)**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 9057.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 16DIP/3 (BTM LAMP ONLY)  
Description: 3/32W T8 4'PENDANT LUMINAIRE w/WHITE REFL IN OPEN TOP  
PERF SIDES w/OVERLAY, 16-CELL SATIN PARAB LOUVER-DWN  
Light Source: F32T8/735/RS  
Ballast/Driver: ENERGY SAVINGS #ES-1-T8-32-120-A

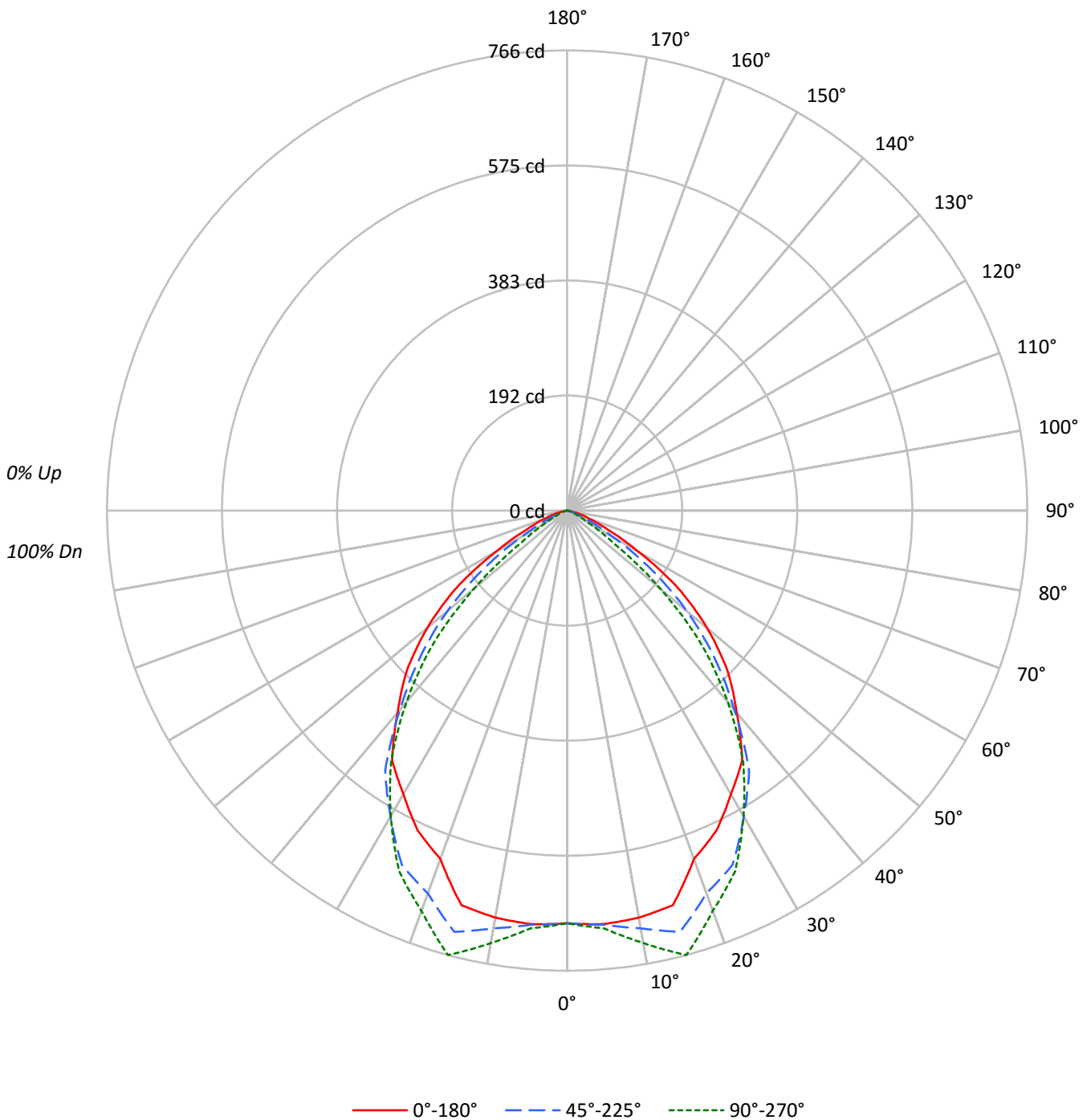
**Summary**

Lumens per Lamp: 2850 (1 lamp)  
Luminaire Lumens: 1361.0 lumens  
Efficiency: 47.8%  
Efficacy: 38.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.33')  
CIE Type: Direct

Input Watts (W): 35  
Input Voltage (V): NR  
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

TEST NUMBER: 9057.0  
CATALOG NUMBER: 16DIP/3 (BTM LAMP ONLY)

### Luminous Intensity Polar Plot





TEST NUMBER: 9057.0

CATALOG NUMBER: 16DIP/3 (BTM LAMP ONLY)

**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	57	57	57	57	56	56	56	56	53	53	53	51	51	51	49	49	49	48
1	53	52	50	49	52	51	49	48	49	48	46	47	46	45	45	44	44	43
2	50	47	44	42	49	46	43	42	44	42	41	43	41	40	41	40	39	38
3	46	42	39	37	45	41	39	36	40	38	36	39	37	35	38	36	34	34
4	43	38	35	32	42	38	34	32	36	34	31	35	33	31	34	32	31	30
5	40	35	31	28	39	34	31	28	33	30	28	32	30	28	32	29	27	27
6	37	32	28	25	36	31	28	25	30	27	25	30	27	25	29	27	25	24
7	35	29	25	23	34	29	25	23	28	25	23	27	25	22	27	24	22	22
8	32	27	23	21	32	26	23	21	26	23	21	25	22	20	25	22	20	19
9	30	25	21	19	30	24	21	19	24	21	19	23	21	19	23	20	19	18
10	29	23	20	17	28	23	19	17	22	19	17	22	19	17	21	19	17	16

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

	0°	45°	90°
0°	1849	1849	1849
5°	1853	1822	1832
10°	1853	1834	1887
15°	1853	1875	1959
20°	1715	1754	1811
25°	1681	1700	1701
30°	1616	1562	1530
35°	1577	1438	1361
40°	1441	1220	1142
45°	1328	1020	908
50°	1158	806	608
55°	948	565	296
60°	640	310	140
65°	394	141	71
70°	250	70	41
75°	151	35	19
80°	74	23	16
85°	47	7	6



TEST NUMBER: 9057.0  
 CATALOG NUMBER: 16DIP/3 (BTM LAMP ONLY)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	66.6	4.9	2.3
10°-20°	199.8	14.7	7.0
20°-30°	290.8	21.4	10.2
30°-40°	321.7	23.6	11.3
40°-50°	269.8	19.8	9.5
50°-60°	150.9	11.1	5.3
60°-70°	46.8	3.4	1.6
70°-80°	12.1	0.9	0.4
80°-90°	2.2	0.2	0.1
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	557.3	40.9	19.6
0°-40°	879.0	64.6	30.8
0°-60°	1299.8	95.5	45.6
0°-90°	1361.0	100.0	47.8
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	1361.0	100.0	47.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	691	691	692	697	698	66
15°	680	692	726	755	766	188
25°	588	616	651	655	662	270
35°	508	545	528	507	511	313
45°	378	400	347	318	318	289
55°	226	220	171	111	93	199
65°	73	59	36	22	19	79
75°	19	16	7	6	4	22
85°	3	3	1	1	1	4
90°	0	0	0	0	0	



TEST NUMBER: 9057.0

CATALOG NUMBER: 16DIP/3 (BTM LAMP ONLY)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	687	687	687	687	687
5°	691	691	692	697	698
10°	688	692	706	724	731
15°	680	692	726	755	766
20°	617	634	678	705	709
25°	588	616	651	655	662
30°	545	580	588	580	587
35°	508	545	528	507	511
40°	439	473	433	404	416
45°	378	400	347	318	318
50°	304	311	260	216	203
55°	226	220	171	111	93
60°	136	125	87	49	41
65°	73	59	36	22	19
70°	39	32	16	12	10
75°	19	16	7	6	4
80°	7	7	4	3	3
85°	3	3	1	1	1
90°	0	0	0	0	0

(END OF REPORT)