

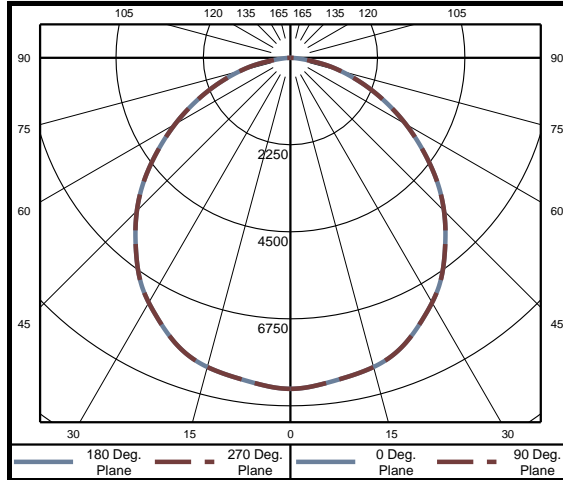


**Lighting ETC Inc**  
Catalog Number  
**OPT-24L-4K-U-FD-XX (REF FZA)**



Electrical Test Conditions						
Temp	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.5 °C	120.1 VAC	1.529 A	183.1 W	0.998	60 Hz	5.47 %

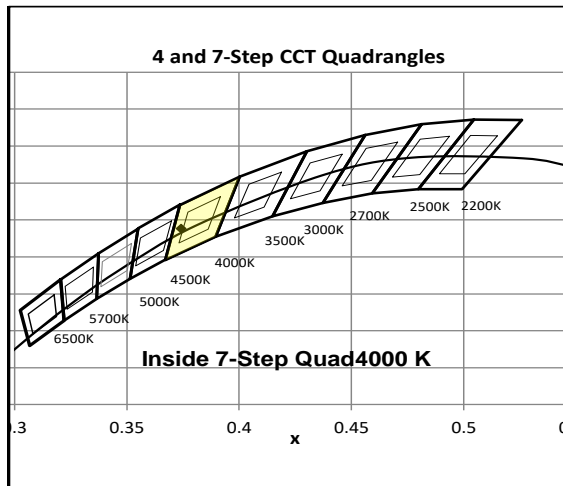
Summary of Results	
Total Lumen Output	24090 Lumens
Luminaire Efficacy	131.4 lm/w
Maximum Candela	8561 Candela
CCT	4166 K
CRI	82.6
Duv	0.0014
TM-30 Rf	83.0
TM-30 Rg	96.0



Intensity (Candlepower) Summary		
Angle	Mean CP	Lumens
0	8561	
5	8490	807
10	8383	
15	8279	2338
20	8076	
25	7719	3558
30	7311	
35	6825	4259
40	6219	
45	5606	4318
50	4926	
55	4176	3736
60	3442	
65	2716	2692
70	2022	
75	1375	1455
80	739	
85	198	279
90	0	

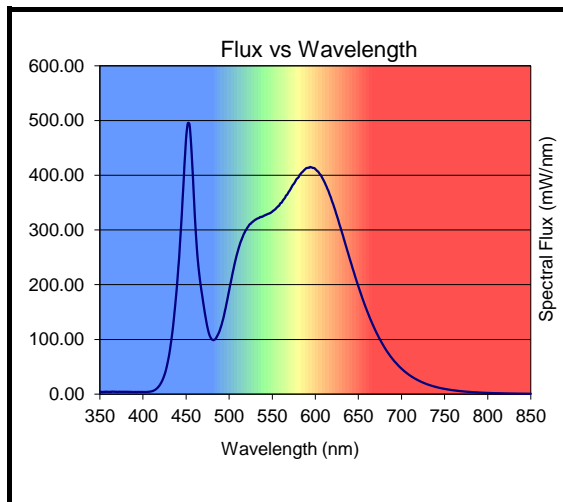
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	6702	28.6%
0-40	10961	46.8%
0-60	19017	81.1%
0-90	23443	100.0%
40-90	12482	53.2%
60-90	4426	18.9%
90-180	0	0.0%
0-180	23443	100.0%

Spacing Criteria	
0-180	1.27
90-270	1.27



Color Rendering Index Details	
Ra (CRI)	
Ra (CRI)	82.6
R1	81.3
R2	88.1
R3	93.5
R4	82.7
R5	81.1
R6	83.7
R7	86.4
R8	64.4
R9	4.9
R10	71.7
R11	82.3
R12	58.1
R13	83
R14	96.5

Average Luminance cd/m <sup>2</sup>	
Vertical Angle	Horizontal Angle 0°
0	42240
45	39120
55	35920
65	31700
75	26220
85	11230



Cone of Light Tabulation		
Mounting Height (Ft)	Footcandles at Nadir	Diameter (Ft)
4.00	535	5.07
6.00	238	7.60
8.00	134	10.1
10.0	85.6	12.7
12.0	59.5	15.2
14.0	43.7	17.7
16.0	33.4	20.3

Chromaticity Coordinates	
Chromaticity (x)	0.3741
Chromaticity (y)	0.3754
Chromaticity (u)	0.2214
Chromaticity (v)	0.3334
Chromaticity (u')	0.2214
Chromaticity (v')	0.5000
Duv	0.0014

Testing was performed in accordance with LM-79-08  
The results contained in this summary pertain only to report #13935233.02