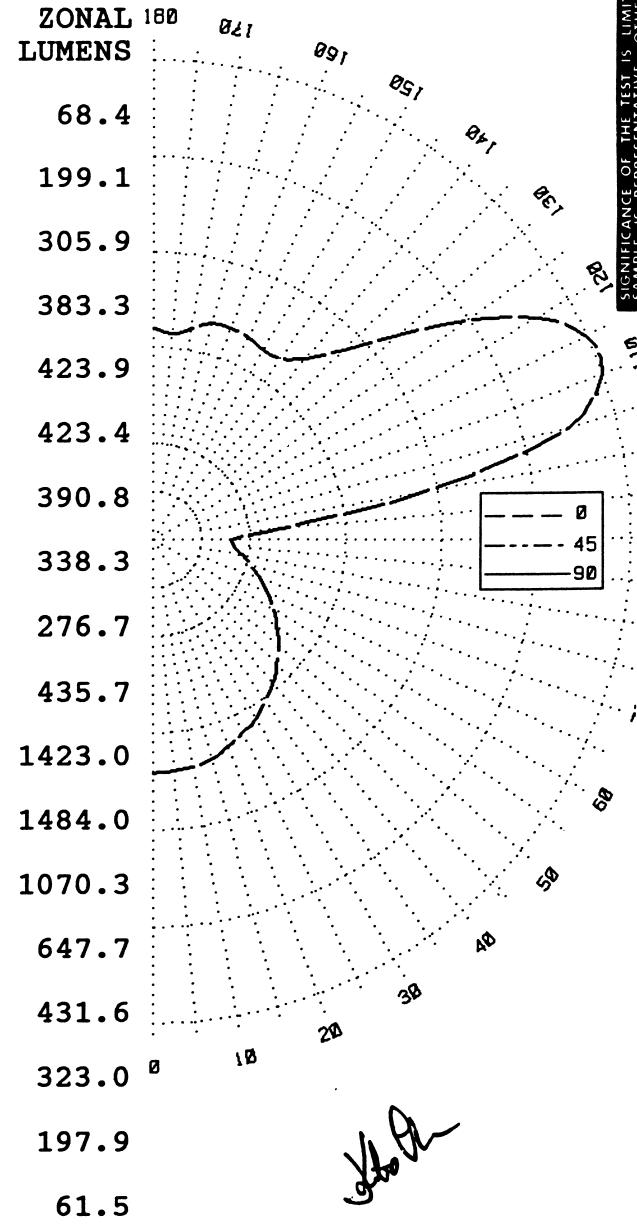


BALLABS CERTIFIED TEST REPORT NO.: 8424.1 DATE 08/29/95
 PREPARED FOR: GROSS CHANDELIER COMPANY - ST. LOUIS, MISSOURI
 DESCRIPTION: 1/175W CTD ED28 LAMP 18"DIA DIR/INDIRECT LUMINAIRE
 CLR/FROSTED/LENS w/WHITE REFLECTOR
 WHITE ACRYLIC BOWL w/OPEN TOP
 CATALOG NBR: *** **GENERATED FROM #8424.0***
 LAMP TYPE : M57PF-175 LUMENS 15000. NBR. LAMPS:- 1

CANDLEPOWER DISTRIBUTION

VERT ANG	AVERAGE CANDELA	ZONAL LUMENS
0	723.	68.4
5	717.	199.1
10	712.	305.9
15	702.	383.3
20	682.	423.9
25	661.	423.4
30	641.	390.8
35	610.	338.3
40	583.	276.7
45	547.	435.7
50	514.	1423.0
55	472.	1484.0
60	435.	1070.3
65	394.	647.7
70	357.	431.6
75	320.	323.0
80	284.	197.9
85	254.	61.5
90	241.	
95	399.	
100	847.	
105	1345.	
110	1497.	
115	1495.	
120	1385.	
125	1193.	
130	993.	
135	836.	
140	737.	
145	687.	
150	680.	
155	698.	
160	700.	
165	698.	
170	668.	
175	644.	
180	660.	



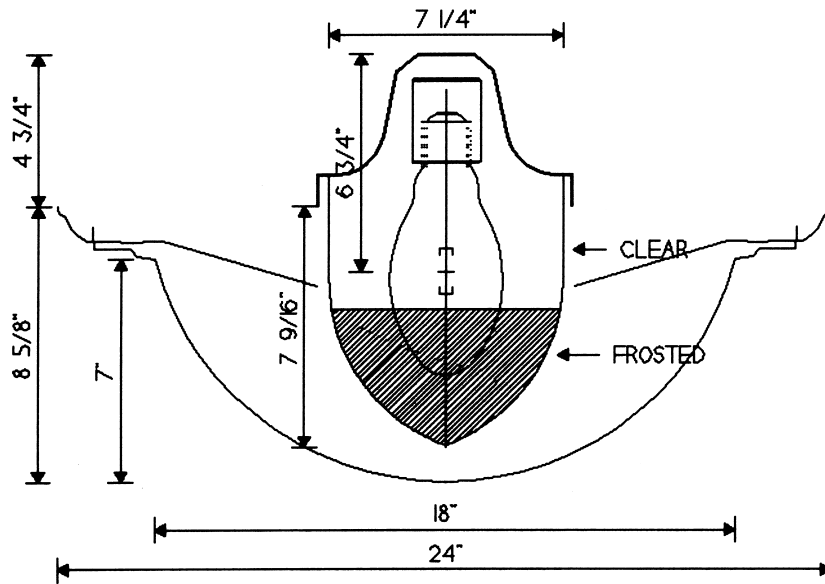
LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	573.	3.8	6.5	90-120	3343.	22.3	37.6
0- 40	957.	6.4	10.8	90-130	4413.	29.4	49.7
0- 60	1804.	12.0	20.3	90-150	5492.	36.6	61.8
0- 90	2810.	18.7	31.6	90-180	6075.	40.5	68.4
TOTAL LUMINAIRE =				0-180	8885.	59.2	100.0

IES SPACING CRITERIA: ADJACENT= 1.3 DIAGONAL= .9

SIGNIFICANCE OF THE TEST IS LIMITED TO THE DEGREE THAT THE TESTED SAMPLE IS REPRESENTATIVE. OTHER FACTORS AFFECT FIELD PERFORMANCE.

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Handwritten signature

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ZONAL CAVITY COEFFICIENTS OF UTILIZATION

EFFECTIVE FLOOR CAVITY REFLECTANCE=.20

CEILING	.80				.70				.50				.30				.10				.00
WALL	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.00
RCR																					
0	.61	.61	.61	.61	.55	.55	.55	.55	.43	.43	.43	.33	.33	.33	.23	.23	.23	.23	.23	.23	.19
1	.55	.52	.49	.47	.49	.47	.45	.43	.37	.35	.34	.28	.27	.26	.20	.19	.18	.19	.18	.14	
2	.50	.45	.41	.38	.44	.40	.37	.34	.32	.30	.28	.24	.22	.21	.17	.16	.15	.16	.15	.12	
3	.45	.39	.35	.31	.40	.35	.32	.28	.28	.25	.23	.21	.19	.18	.15	.14	.12	.15	.14	.10	
4	.41	.35	.30	.26	.37	.31	.27	.24	.25	.22	.19	.19	.17	.15	.13	.12	.11	.15	.14	.08	
5	.38	.31	.26	.22	.33	.28	.23	.20	.22	.19	.16	.16	.14	.13	.11	.10	.09	.14	.13	.07	
6	.34	.27	.23	.19	.31	.25	.20	.17	.20	.16	.14	.15	.13	.11	.10	.09	.08	.13	.12	.06	
7	.32	.25	.20	.17	.28	.22	.18	.15	.18	.15	.12	.13	.11	.09	.09	.08	.07	.12	.11	.05	
8	.29	.22	.18	.15	.26	.20	.16	.13	.16	.13	.11	.12	.10	.08	.08	.07	.06	.11	.10	.04	
9	.27	.20	.16	.13	.24	.18	.14	.12	.14	.11	.09	.11	.09	.07	.08	.06	.05	.10	.09	.04	
10	.25	.18	.14	.11	.23	.17	.13	.10	.13	.10	.08	.10	.08	.06	.07	.05	.04	.09	.08	.03	

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES