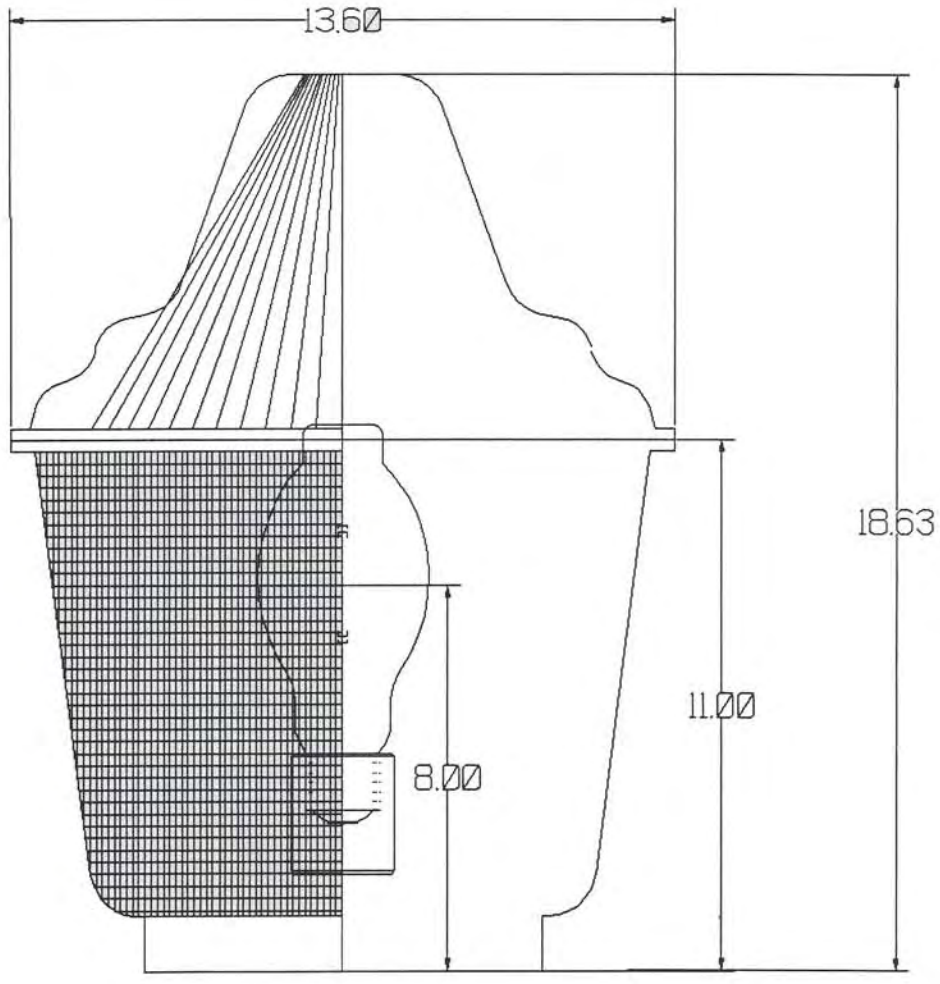


BALLABS CERTIFIED TEST REPORT NO.: 10726.0 DATE 06/28/00
PREPARED FOR: POLYMER PRODUCTS, LLC - STAMFORD, CONN
DESCRIPTION: 1/175W CLEAR BT28 MH LAMP 12.5"DIA POST LIGHT LUMINAIRE
 12.5"TYPE III GLASS REFRACTOR/GLOBE CAT#1902-03002
 12.5"DIA FLUTED GLASS REFRACTOR/GLOBE TOP CAT#1902-03000
CATALOG NBR: GLASS ACORN TYPE III
LAMP TYPE : M57PE-175 RATED LUMENS 15000. NBR. LAMPS:- 1



IES CUTOFF CLASSIFICATION: NON CUTOFF
IES ROADWAY CLASSIFICATION: TYPE IV -SHORT
TESTED IN ACCORDANCE WITH CURRENT IES STANDARDS

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

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 CATALOG NBR: GLASS ACORN TYPE III
 LAMP TYPE : M57PE-175 RATED LUMENS 15000. NBR. LAMPS:- 1

CANDLEPOWER DISTRIBUTION

VERT	HORIZONTAL										
	0.	5.	15.	25.	35.	45.	55.	65.	75.	85.	90.
.0	192.	192.	192.	192.	192.	192.	192.	192.	192.	192.	192.
5.0	213.	219.	221.	230.	222.	221.	223.	217.	208.	198.	192.
10.0	263.	262.	258.	258.	251.	248.	245.	241.	236.	224.	217.
15.0	339.	351.	316.	312.	286.	298.	281.	312.	319.	316.	315.
20.0	424.	437.	418.	406.	379.	366.	371.	367.	351.	350.	336.
25.0	554.	541.	546.	481.	467.	501.	528.	527.	507.	495.	462.
30.0	866.	862.	856.	743.	617.	646.	772.	891.	961.	770.	684.
35.0	1099.	1157.	1212.	1032.	924.	842.	1110.	1365.	1403.	1213.	1233.
40.0	734.	755.	760.	676.	571.	502.	746.	917.	951.	785.	668.
45.0	868.	912.	882.	812.	677.	542.	901.	1246.	1162.	985.	889.
50.0	1113.	1182.	1152.	1092.	887.	704.	1273.	1928.	1731.	1377.	1179.
55.0	1641.	1706.	1794.	1555.	1316.	1095.	1830.	2670.	2397.	1819.	1538.
60.0	2271.	2362.	2671.	2170.	1876.	1844.	2665.	3668.	3297.	2308.	2303.
62.5	2552.	2702.	3076.	2464.	2144.	2226.	2983.	4165.	3775.	2537.	2940.
65.0	2706.	2906.	3462.	2776.	2405.	2503.	3327.	4766.	4176.	2807.	3359.
67.5	2646.	2862.	3514.	2816.	2378.	2454.	3284.	4937.	4200.	2723.	3440.
70.0	2324.	2529.	3093.	2500.	2153.	2246.	2868.	4347.	3647.	2435.	2995.
72.5	1972.	2070.	2512.	2094.	1927.	1930.	2343.	3448.	2978.	2065.	2465.
75.0	1565.	1668.	2095.	1777.	1708.	1683.	1944.	2659.	2460.	1740.	2054.
77.5	1356.	1490.	1874.	1585.	1596.	1536.	1711.	2328.	2126.	1579.	1773.
80.0	1241.	1332.	1636.	1415.	1422.	1361.	1500.	1993.	1873.	1388.	1564.
82.5	1102.	1200.	1417.	1231.	1238.	1208.	1290.	1646.	1544.	1222.	1323.
85.0	1005.	1053.	1250.	1081.	1098.	1072.	1114.	1421.	1336.	1104.	1138.
87.5	915.	944.	1148.	990.	988.	962.	1001.	1250.	1191.	1015.	1046.
90.0	851.	881.	1061.	923.	899.	892.	934.	1128.	1070.	908.	953.
95.0	717.	752.	927.	813.	790.	783.	835.	991.	933.	841.	837.
105.0	763.	765.	897.	832.	752.	757.	804.	912.	882.	833.	843.
115.0	1047.	1184.	1257.	1173.	1129.	1116.	1240.	1292.	1280.	1200.	1206.
125.0	869.	882.	873.	909.	878.	868.	960.	968.	868.	833.	846.
135.0	615.	628.	647.	677.	681.	693.	735.	832.	804.	729.	721.
145.0	436.	442.	436.	439.	476.	487.	541.	541.	529.	502.	459.
155.0	415.	416.	420.	414.	447.	521.	520.	497.	484.	466.	449.
165.0	325.	322.	315.	306.	306.	307.	320.	323.	319.	317.	319.
175.0	351.	353.	355.	351.	353.	357.	367.	368.	363.	347.	343.
180.0	348.	347.	345.	341.	345.	346.	353.	345.	353.	366.	372.

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 12.5"DIA FLUTED GLASS REFRACTOR/GLOBE TOP CAT#1902-03000
 CATALOG NBR: GLASS ACORN TYPE III
 LAMP TYPE : M57PE-175 RATED LUMENS 15000. NBR. LAMPS:- 1

CANDLEPOWER DISTRIBUTION

VERT	HORIZONTAL										
	90.	95.	105.	115.	125.	135.	145.	155.	165.	175.	180.
.0	192.	192.	192.	192.	192.	192.	192.	192.	192.	192.	192.
5.0	192.	190.	181.	180.	170.	164.	159.	161.	161.	162.	157.
10.0	217.	215.	205.	201.	194.	186.	179.	182.	183.	180.	180.
15.0	315.	306.	277.	249.	239.	226.	221.	218.	221.	224.	221.
20.0	336.	329.	316.	302.	294.	289.	280.	277.	270.	277.	273.
25.0	462.	434.	401.	360.	350.	323.	328.	307.	316.	325.	313.
30.0	684.	626.	529.	521.	475.	471.	476.	453.	462.	486.	479.
35.0	1233.	1198.	1091.	1011.	698.	972.	918.	781.	805.	706.	772.
40.0	668.	591.	495.	512.	497.	469.	468.	466.	473.	503.	496.
45.0	889.	834.	627.	666.	632.	687.	659.	668.	639.	616.	627.
50.0	1179.	1104.	778.	800.	763.	834.	784.	750.	682.	659.	667.
55.0	1538.	1523.	1050.	935.	844.	898.	853.	789.	697.	673.	668.
60.0	2303.	2032.	1521.	1219.	1069.	1107.	1002.	885.	804.	756.	750.
62.5	2940.	2325.	1895.	1409.	1264.	1239.	1095.	939.	874.	810.	795.
65.0	3359.	2512.	2140.	1583.	1369.	1338.	1141.	984.	899.	841.	819.
67.5	3440.	2372.	2153.	1590.	1406.	1367.	1137.	1002.	909.	857.	831.
70.0	2995.	2017.	1963.	1482.	1320.	1295.	1088.	989.	908.	867.	834.
72.5	2465.	1691.	1727.	1342.	1200.	1196.	1039.	982.	911.	895.	847.
75.0	2054.	1495.	1594.	1227.	1118.	1112.	999.	963.	911.	906.	873.
77.5	1773.	1348.	1517.	1155.	1070.	1050.	971.	945.	913.	918.	886.
80.0	1564.	1220.	1439.	1116.	1041.	993.	938.	927.	915.	937.	916.
82.5	1323.	1107.	1328.	1084.	1008.	949.	926.	939.	930.	970.	930.
85.0	1138.	988.	1187.	1033.	977.	898.	905.	922.	937.	994.	942.
87.5	1046.	923.	1088.	982.	940.	866.	907.	929.	963.	1032.	972.
90.0	953.	850.	1017.	971.	921.	847.	906.	937.	991.	1054.	999.
95.0	837.	769.	932.	909.	864.	837.	903.	926.	989.	1048.	1039.
105.0	843.	755.	857.	864.	787.	874.	997.	1058.	1169.	1131.	1097.
115.0	1206.	1169.	1068.	1003.	995.	915.	969.	865.	861.	804.	790.
125.0	846.	826.	786.	728.	734.	742.	699.	637.	622.	633.	648.
135.0	721.	733.	709.	658.	649.	660.	679.	645.	625.	610.	620.
145.0	459.	433.	425.	422.	405.	390.	385.	383.	376.	379.	381.
155.0	449.	434.	394.	382.	364.	351.	339.	331.	324.	322.	322.
165.0	319.	320.	320.	323.	316.	312.	308.	312.	314.	313.	316.
175.0	343.	336.	323.	313.	300.	299.	299.	305.	302.	302.	306.
180.0	372.	383.	386.	400.	409.	411.	415.	415.	408.	400.	390.

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 12.5"DIA FLUTED GLASS REFRACTOR/GLOBE TOP CAT#1902-03000
 CATALOG NBR: GLASS ACORN TYPE III
 LAMP TYPE : M57PE-175 RATED LUMENS 15000. NBR. LAMPS:- 1

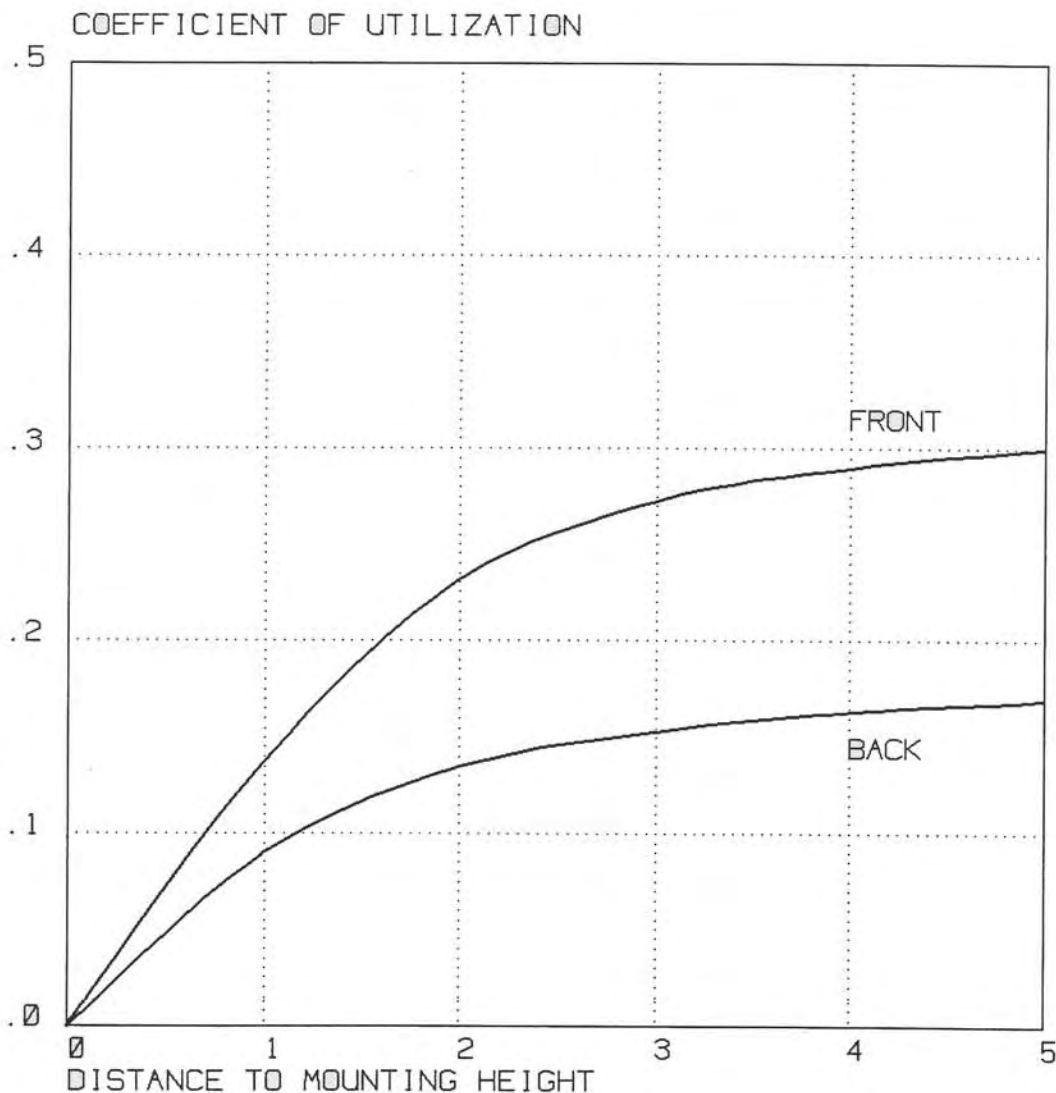
ZONAL LUMENS

VERT	HORIZONTAL								
	5.	15.	25.	35.	45.	55.	65.	75.	85.
5.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1
15.0	5.5	5.0	4.9	4.5	4.7	4.4	4.9	5.0	5.0
25.0	13.9	14.0	12.4	12.0	12.9	13.6	13.6	13.0	12.7
35.0	40.4	42.3	36.0	32.2	29.4	38.7	47.6	49.0	42.3
45.0	39.2	37.9	34.9	29.1	23.3	38.8	53.6	50.0	42.4
55.0	85.0	89.4	77.5	65.6	54.6	91.2	133.1	119.5	90.7
65.0	160.3	190.9	153.1	132.6	138.0	183.5	262.8	230.3	154.8
75.0	98.0	123.1	104.4	100.4	98.9	114.3	156.3	144.6	102.3
85.0	63.8	75.8	65.5	66.6	65.0	67.5	86.1	81.0	66.9
95.0	45.6	56.2	49.3	47.9	47.5	50.6	60.1	56.6	51.0
105.0	45.0	52.7	48.9	44.2	44.5	47.3	53.6	51.8	49.0
115.0	65.3	69.3	64.7	62.3	61.5	68.4	71.2	70.6	66.2
125.0	44.0	43.5	45.3	43.8	43.3	47.8	48.2	43.3	41.5
135.0	27.0	27.8	29.1	29.3	29.8	31.6	35.8	34.6	31.4
145.0	15.4	15.2	15.3	16.6	17.0	18.9	18.9	18.5	17.5
155.0	10.7	10.8	10.6	11.5	13.4	13.4	12.8	12.4	12.0
165.0	5.1	5.0	4.8	4.8	4.8	5.0	5.1	5.0	5.0
175.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.8

VERT	HORIZONTAL								
	95.	105.	115.	125.	135.	145.	155.	165.	175.
5.0	1.0	1.0	1.0	.9	.9	.8	.9	.9	.9
15.0	4.8	4.4	3.9	3.8	3.6	3.5	3.4	3.5	3.5
25.0	11.2	10.3	9.3	9.0	8.3	8.4	7.9	8.1	8.4
35.0	41.8	38.1	35.3	24.4	33.9	32.0	27.3	28.1	24.6
45.0	35.9	27.0	28.7	27.2	29.6	28.4	28.7	27.5	26.5
55.0	75.9	52.3	46.6	42.1	44.8	42.5	39.3	34.7	33.5
65.0	138.5	118.0	87.3	75.5	73.8	62.9	54.3	49.6	46.4
75.0	87.9	93.7	72.1	65.7	65.4	58.7	56.6	53.5	53.2
85.0	59.9	71.9	62.6	59.2	54.4	54.9	55.9	56.8	60.3
95.0	46.6	56.5	55.1	52.4	50.7	54.7	56.1	59.9	63.5
105.0	44.4	50.4	50.8	46.3	51.4	58.6	62.2	68.7	66.5
115.0	64.5	58.9	55.3	54.9	50.5	53.4	47.7	47.5	44.3
125.0	41.2	39.2	36.3	36.6	37.0	34.8	31.7	31.0	31.6
135.0	31.5	30.5	28.3	27.9	28.4	29.2	27.8	26.9	26.2
145.0	15.1	14.8	14.7	14.1	13.6	13.4	13.4	13.1	13.2
155.0	11.2	10.1	9.8	9.4	9.0	8.7	8.5	8.3	8.3
165.0	5.0	5.0	5.1	5.0	4.9	4.9	4.9	4.9	4.9
175.0	1.8	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6

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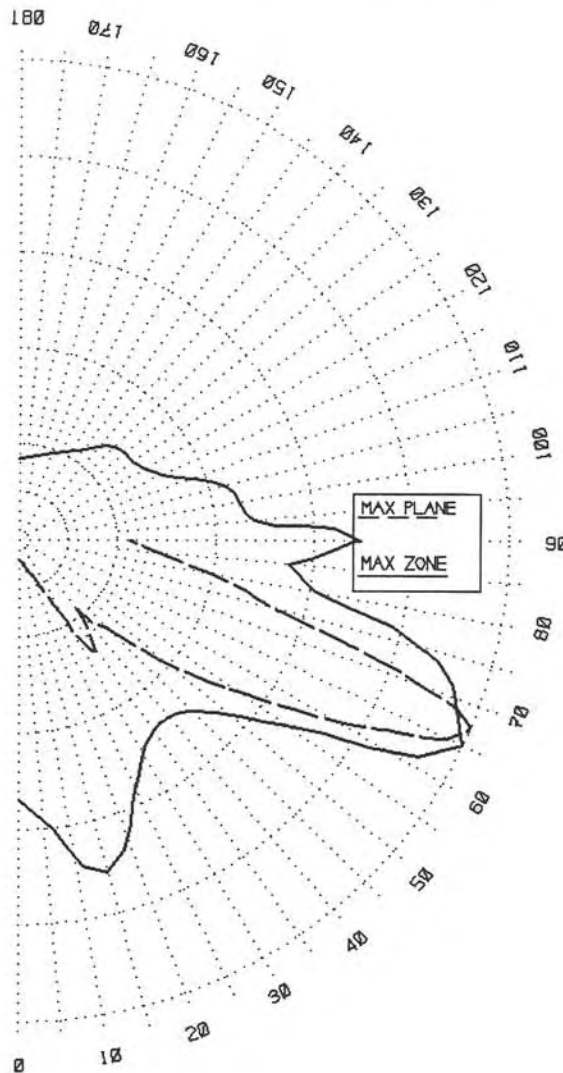
COEFFICIENTS OF UTILIZATION			EFFICIENCY		
RATIO	FRONT	BACK	BACK	LUMENS	%LAMP
0.5	.059	.041	DOWNWARD	2929.	19.5
1.0	.138	.090	UPWARD	2316.	15.4
2.0	.232	.135	FRONT		
3.0	.273	.154	DOWNWARD	4973.	33.2
4.0	.290	.164	UPWARD	2501.	16.7
5.0	.300	.170	TOTAL	12719.	84.8



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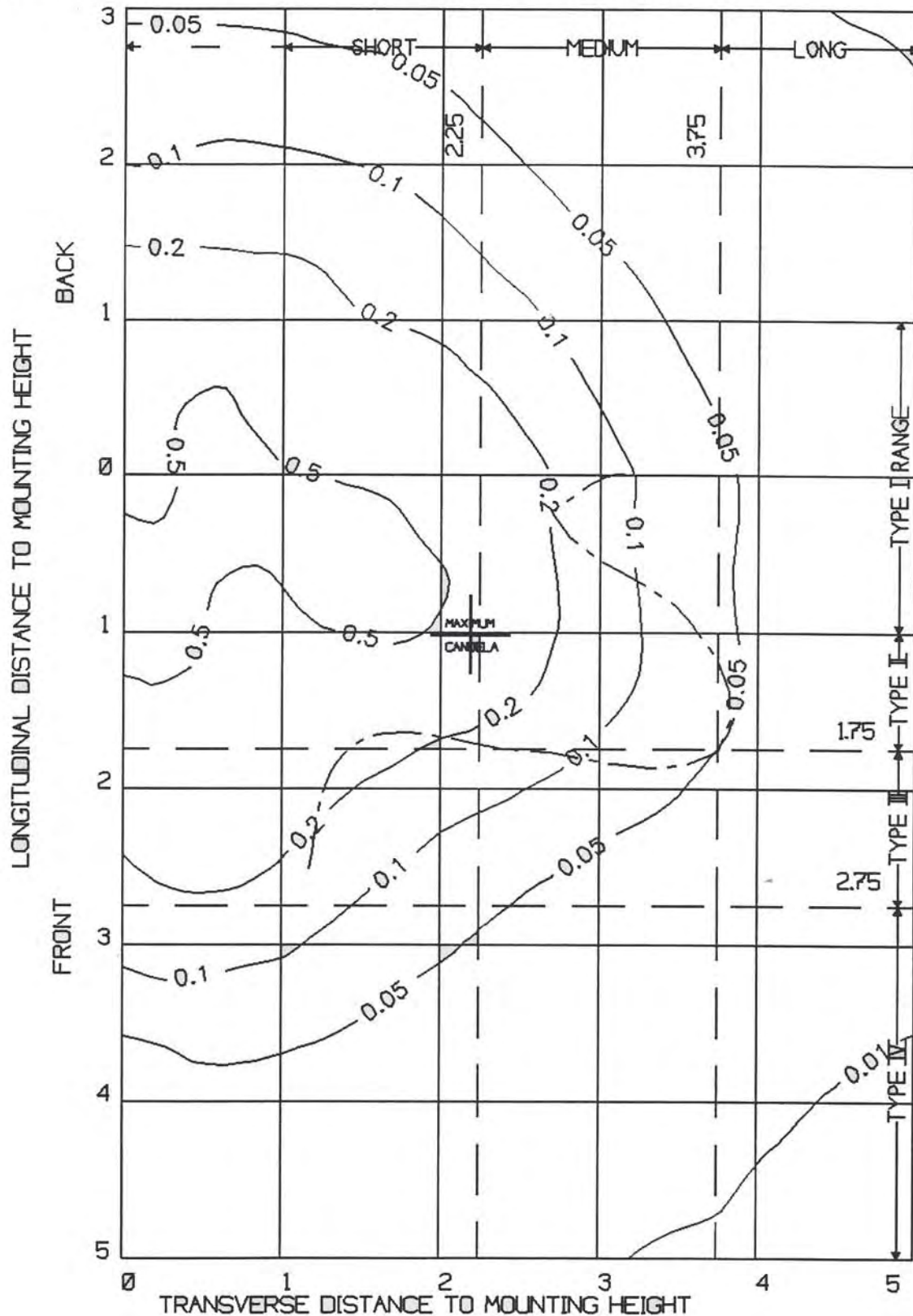
VALUE OF MAXIMUM BEAM CANDLEPOWER 4937.
 PLANE OF MAXIMUM BEAM CANDLEPOWER 65.
 ZONE OF MAXIMUM BEAM CANDLEPOWER 67.5

ANGLE	CANDLEPOWER IN MAX. PLANE
.0	192.
5.0	217.
10.0	241.
15.0	312.
20.0	367.
25.0	527.
30.0	891.
35.0	1365.
40.0	917.
45.0	1246.
50.0	1928.
55.0	2670.
60.0	3668.
62.5	4165.
65.0	4766.
67.5	4937.
70.0	4347.
72.5	3448.
75.0	2659.
77.5	2328.
80.0	1993.
82.5	1646.
85.0	1421.
87.5	1250.
90.0	1128.



ANGLE	CANDLEPOWER IN MAX. ZONE
0	2646.
5	2862.
15	3514.
25	2816.
35	2378.
45	2454.
55	3284.
65	4937.
75	4200.
85	2723.
90	3440.
95	2372.
105	2153.
115	1590.
125	1406.
135	1367.
145	1137.
155	1002.
165	909.
175	857.
180	831.

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 ISO-FOOTCANDLES - 25.00 FOOT MOUNTING HEIGHT



TO CONVERT
 TO NEW MH
 MULTIPLY FC
 BY
 MH : XFC

 15. : 2.78
 16. : 2.44
 17. : 2.16
 18. : 1.93
 19. : 1.73
 20. : 1.56
 21. : 1.42
 22. : 1.29
 23. : 1.18
 24. : 1.09
 25. : 1.00
 26. : .92
 27. : .86
 28. : .80
 29. : .74
 30. : .69
 31. : .65
 32. : .61
 33. : .57
 34. : .54
 35. : .51