

SYSTEM TNP

Standard-Output Transformer-Operated Cold Cathode

Photometry

System type: TNP (standard-output transformer-operated cold cathode)
Lamp operating current: 100 mA

CATALOG NUMBER: TNP

LUMINAIRE: ASSEMBLED PLYWOOD COVE PAINTED WHITE, NO ENCLOSURE

LAMPS: ONE 4' 25MM 42TC COLD CATHODE LAMP RATED AT 1432 LUMENS

BALLAST: CATHODE LIGHTING SYSTEMS

MOUNTING: WALL

LUMEN TO CANDELLA RATIO USED = 9.18

TOTAL INPUT WATTS = 26.4 AT 100 mA OPERATING CURRENT

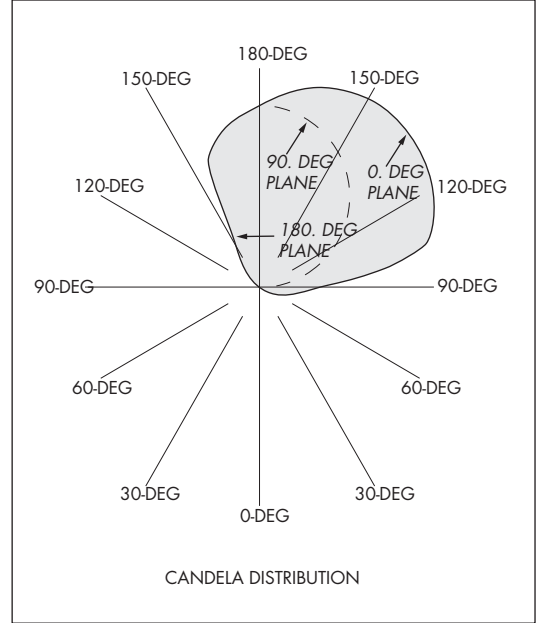
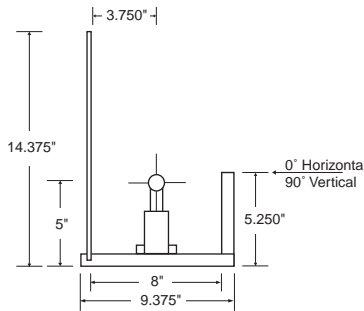
THE 0 DEGREE PLANE IS PERPENDICULAR TO THE LAMPS.

CANDELA DISTRIBUTION											FLUX
	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0		
0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
35	0	0	2	3	0	0	3	3	0	0	1
45	4	6	7	7	2	4	7	7	0	0	3
55	14	15	13	8	7	9	6	7	0	0	9
65	34	39	34	21	6	14	12	6	0	0	19
75	64	66	57	38	6	21	12	5	0	0	32
85	100	101	85	57	11	21	14	6	0	0	49
90	133	144	120	80	18	25	14	6	0	0	60
95	221	231	198	126	31	28	16	8	0	0	100
105	335	315	258	173	78	36	19	7	0	0	140
115	370	350	297	227	136	47	19	7	0	0	158
125	391	375	333	273	191	77	22	7	0	0	165
135	411	397	365	308	238	149	49	7	0	0	166
145	422	409	381	332	279	236	86	54	48	0	158
155	418	406	384	349	311	280	246	117	98	0	136
165	400	389	375	354	332	314	298	282	288	0	95
175	368	360	356	349	342	336	331	327	333	0	33
180	344	344	344	344	344	344	344	344	344	0	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0-30	0	0.0	0.0
0-40	1	0.1	0.1
0-60	13	0.9	1.0
0-90	112	7.9	8.9
90-120	397	27.7	31.5
90-130	563	39.3	44.6
90-150	886	61.9	70.2
90-180	1150	80.3	91.1
0-180	1263	88.2	100.0

TOTAL LUMINAIRE EFFICIENCY: 88.2%
TOTAL REFLECTANCE OF PAINT: 90.4%
CIE TYPE: INDIRECT



Complete photometric information is available on our website at www.CathodeLightingSystems.com. Files are in standard IES format and may be downloaded from the *Photometrics* section.

RC	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
0	86	86	86	86	75	75	75	75	53	53	53	34	34	34	16	16	16	8
1	77	72	69	65	66	63	60	57	44	42	40	27	26	25	12	11	11	4
2	69	62	57	52	59	54	49	45	38	35	32	23	21	20	10	9	8	2
3	63	54	48	43	54	47	42	37	33	29	26	20	18	16	8	7	6	1
4	57	48	41	36	49	41	35	31	29	25	22	18	15	13	7	6	5	1
5	52	42	35	30	45	36	31	26	26	22	19	16	13	11	6	5	4	0
6	48	37	31	26	41	32	27	22	23	19	16	14	12	10	6	4	3	0
7	44	34	27	22	38	29	23	19	21	17	14	13	10	8	5	4	3	0
8	41	30	24	19	35	26	21	17	19	15	12	11	9	7	5	3	3	0
9	38	27	21	17	32	24	18	15	17	13	10	10	8	6	4	3	2	0
10	35	25	19	15	30	22	16	13	15	12	9	9	7	6	4	3	2	0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD
EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

NOTE:
The zonal cavity calculation technique is accurate when luminaires within the symmetric candela distributions are employed and when the luminaires are located symmetrically throughout the room. This unit has special characteristics. Therefore these coefficients should be used with caution.

SYSTEM TNP

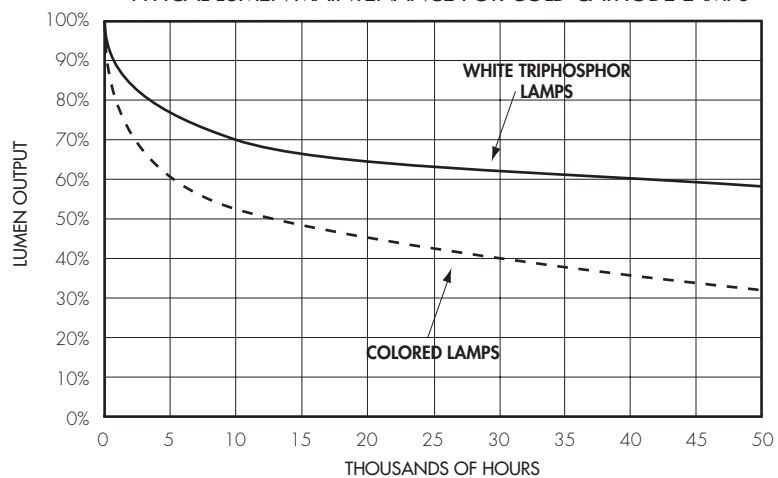
Standard-Output Transformer-Operated Cold Cathode

Photometry (cont'd.)

COLD CATHODE LAMP LUMENS PER FOOT

Lamp Color	Catalog Number	Lumens per Foot System TNP (100 mA lamp current)
Incandescent White	28TC	371
Warm White	30TC	386
Soft White	35TC	374
Cool White	42TC	358
Ice White	50TC	364
Daylight	65TC	369
Pink White	PW	216
Hot Pink	HP	198
Ruby Red	RR	72
Lavender	LV	234
Purple	PR	180
Deep Purple	DP	36
Sky Blue	SB	306
Deep Blue	DB	252
Cobalt Blue	CB	195
Turquoise	TQ	355
Aquamarine	AQ	288
Green	GR	360
Emerald Green	EG	162
Gold	GD	182
Novial Gold	NG	126
Canary Yellow	CY	196
Orange	OR	144

TYPICAL LUMEN MAINTENANCE FOR COLD CATHODE LAMPS



Photometric information by ITL (Independent Test Laboratories), Boulder, CO; LTL (Luminaire Testing Laboratory), Allentown, PA; and Cathode Lighting Systems Inc.