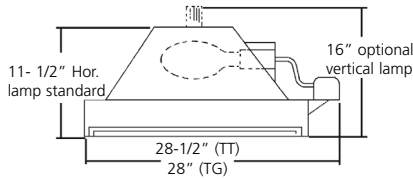


2 x 2 Recessed (TG, TT)



Lamp not included

WEIGHT = 40-43 lbs



2 x 2 Recessed Specification

The 2 X 2 Recessed luminaire is designed to a high standard of performance and value. Available in 100 to 250 watt mogul base high pressure sodium lamp and 175 to 400 watt mogul base metal halide lamp. Available with 120/277 volt, 60Hz ballast. Luminaire shall be completely pre-wired for ease of installation with 5' of #16 Vulkene wire leads and 3/8" connector for quick field connection (flex. by others). Shall be shipped in one carton.

Basic Product Description

Heavy gauge steel housing is die formed and welded to form a rigid frame supporting the reflector. The steel door frame, with 2 positive lock screws, has lift-out concealed hinges for easy servicing. Housing and lens frame are finished in a baked white enamel, complementing the overall appearance of each assembly. Socket housing contains mogul base porcelain socket with nickel plated lamp grip screw shell eliminating lamp loosening. The TG/TT shall be suitable for (T-bar) grid type, lay-in ceilings (TG) or for wet plaster ceilings by using the plaster frame kit (TT). After installation the bottom surface of the fixture must be flush with the ceiling.

Ballast Characteristics

The 2 X 2 Recessed fixture contains a U.L. listed high power factor, constant wattage auto-transformer, 120/277V dual-volt F-can type ballast for extra quiet operation, with auto-reset thermal protection. Ballast will start and operate lamps down to -20°F (-30°C) for metal halide and -40oF (-40°C) for high pressure sodium. Mercury vapor lamps may be used in metal halide fixtures.

Reflector Assembly

A square, pyramidal reflector, stucco textured aluminum with clear anodized finish, formed into a one-piece unit provides a uniform symmetrical wide beam distribution. A Corning #73 impact resistant, prismatic glass lens is standard. See ordering example for other available lenses.

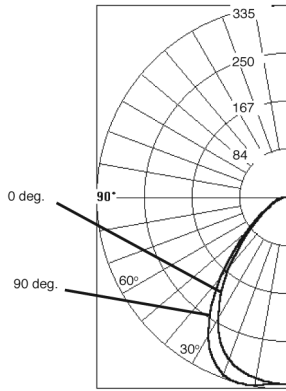
Suggested Applications

Conference rooms, banks, office environments, stores, and corridors.

Ordering Example							
Unit	Wattage	Photometrics	Mounting	Lamp Style	Voltage	Ballast Style	Options
TG	2	5	8	H	120	H	CO
2 x 2 Recessed (TG, TT)	1 - 100 2 - 150 3 - 175 4 - 250 6 - 400	5 - Wide Beam	8- Recessed	H - Metal Halide (coated) LS - High Pressure Sodium	120/277	H - High Power Factor	CO - Corning #73 LX - Drop Lexalite (acrylic) KSH - Triumph 1 (acrylic) PL9 - 9 - 9 Cell Parabolic PL-16 - 16 Cell Parabolic PL-25 - 25 Cell Parabolic PL-36 - 36 Cell Parabolic PL-169 - 169 Cell Parabolic
				Accessories			
				SIF			
				EM - Emergency Quartz Relay and Socket			
				EM60 - Emergency Quartz Delay Relay and Socket			
				QS - Quartz Socket Only (aux. power required)			
				DP - Damp Location			
				TP - Tamper Resistant Screws			
				DR - Decorative 2" Regress (TG only)			
				G - Wire Guard			
				VL - Vertical Lamp			
				TA - Top Access			
				POS - Position Oriented Socket (Super MH only)			
CSA Certification - consult factory.							

2 x 2 Recessed (TG, TT)

Photometrics



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	280.9	26.1	41.2
0-40	404.4	40.4	63.9
0-60	572.6	57.3	90.4
0-90	633.3	63.3	100.0
90-180	0.0	0.0	0.0
0-180	633.3	63.3	100.0

	COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																				
	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	75	75	75	75	74	74	74	74	70	70	70	70	67	67	67	67	65	65	65	65	63
1	71	68	66	65	69	67	65	63	64	63	62	62	61	60	60	60	60	59	58	57	57
2	66	62	59	56	65	61	58	56	59	57	55	55	53	52	52	52	51	50	49	48	47
3	62	57	53	50	61	56	52	49	54	51	49	49	48	47	47	47	46	45	44	43	42
4	58	52	48	45	57	51	47	44	50	46	44	44	43	42	42	42	41	40	39	38	37
5	54	48	43	40	53	47	43	40	46	42	39	39	38	37	37	37	36	35	34	33	32
6	51	44	39	36	50	43	39	36	42	38	35	35	34	33	33	33	32	31	30	29	28
7	47	40	35	32	46	40	35	32	39	35	32	32	31	30	30	30	29	28	27	26	25
8	44	37	32	29	43	36	32	29	36	32	29	29	28	27	27	27	26	25	24	23	22
9	41	34	29	26	40	33	29	26	33	29	26	26	25	24	24	24	23	22	21	20	19
10	38	31	27	24	38	31	26	24	30	26	23	23	22	21	21	21	20	19	18	17	16

Catalog Number: TG/TT-658H-120H-CO
Lamp: Phosphor Coated Metal Halide

Reflector: Pyramidal patterned surface reflector; flat prismatic door glass
Lumens: Per 1,000 lamp lumens
Efficiency: 63.3%
CIE Type: Direct
Luminaire Spacing Criteria: 1.1 - 0 Deg.
1.2 - 90 Deg.

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

DEG	CANDELA	LUMENS
0	0.0	90.0
5	326.0	326.0
15	313.0	335.0
25	277.0	310.0
35	201.0	232.0
45	117.0	133.0
55	59.0	67.0
65	33.0	30.0
75	19.0	18.0
85	6.0	5.0
90	0.0	0.0

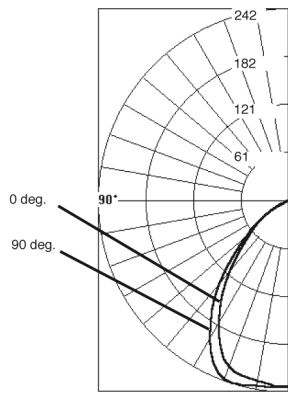
Catalog Number: TG/TT-658H-CO-PL16
Lamp: Phosphor Coated Metal Halide

Reflector: Stucco textured aluminum reflector, specular aluminum parabolic 16-cell louver with clear flat prismatic glass overlay
Lumens: Per 1,000 lamp lumens
Efficiency: 42.4%
CIE Type: Direct
Luminaire Spacing Criteria: 1.1 - 0 Deg.
1.2 - 90 Deg.

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

DEG	CANDELA	LUMENS
0	0.0	90.0
5	235.3	235.0
15	229.2	242.0
25	205.8	227.0
35	148.2	172.0
45	85.5	101.0
55	47.1	51.0
65	8.2	11.0
75	1.4	2.0
85	0.0	0.0
90	0.0	0.0

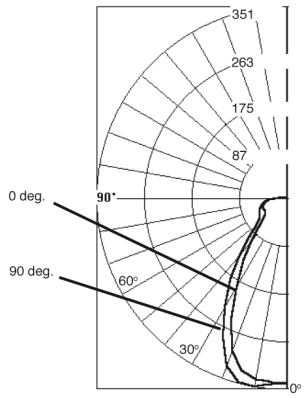


ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	187.8	18.8	44.3
0-40	291.2	29.1	68.7
0-60	409.8	41.0	96.8
0-90	423.6	42.4	100.0
90-180	0.0	0.0	0.0
0-180	423.6	42.4	100.0

	COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																				
	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	50	50	50	50	49	49	49	49	47	47	47	47	45	45	45	45	43	43	43	43	42
1	47	46	45	44	46	45	44	43	43	42	42	42	42	41	40	40	40	40	39	38	38
2	44	42	40	38	43	41	39	37	40	38	36	36	38	37	36	36	37	36	35	34	34
3	41	38	35	33	40	37	35	33	36	34	32	32	35	33	32	32	34	32	31	30	30
4	38	34	31	29	38	34	31	29	33	31	29	29	32	30	28	28	31	29	28	27	27
5	36	31	28	26	35	31	28	26	30	28	26	26	29	27	25	25	29	27	25	24	24
6	33	29	26	23	33	28	25	23	28	25	23	23	27	25	23	23	26	24	23	22	22
7	31	26	23	21	31	26	23	21	26	23	21	21	25	23	21	21	24	22	21	20	20
8	29	24	21	19	29	24	21	19	24	21	19	19	23	21	19	19	23	20	19	18	18
9	28	23	20	17	27	22	19	17	22	19	17	17	21	19	17	17	21	19	17	17	17
10	26	21	18	16	25	21	18	16	20	18	16	16	20	18	16	16	20	17	16	15	15



2 x 2 Recessed (TG, TT)



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	259.0	25.9	41.3
0-40	364.0	36.4	58.0
0-60	478.0	47.8	76.2
0-90	608.0	60.8	96.9
90-180	19.0	1.9	3.1
0-180	627.0	62.7	100.0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

	80				70				50				30				10				0	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
0	74	74	74	74	72	72	72	72	69	69	69	65	65	65	62	62	62	61				61
1	68	65	63	60	66	64	61	59	61	59	57	58	56	55	55	54	53	51				51
2	63	58	55	51	61	57	54	51	55	52	49	52	50	48	50	48	46	45				45
3	59	53	48	45	57	52	48	44	50	46	43	48	45	42	46	44	41	40				40
4	55	49	44	40	53	48	43	40	46	42	39	44	41	38	43	40	38	36				36
5	51	44	40	36	50	44	39	36	42	38	35	41	37	35	40	37	34	33				33
6	48	41	36	33	47	40	36	33	39	35	32	38	35	32	37	34	31	30				30
7	45	38	33	30	44	37	33	30	36	32	29	35	32	29	34	31	29	28				28
8	43	35	31	27	42	35	30	27	34	30	27	33	29	27	32	29	27	25				25
9	40	33	28	25	39	32	28	25	31	28	25	31	27	25	30	27	24	23				23
10	38	31	26	23	37	30	26	23	29	26	23	29	25	23	28	25	23	22				22

Catalog Number: TG/TT-658H-KSH
Lamp: Phosphor Coated Metal Halide

Reflector: Pyramidal patterned surface reflector; pyramidal shaped prismatic drop lens

Lumens: Per 1,000 lamp lumens

Efficiency: 62.7%

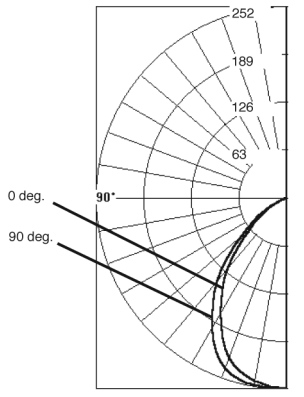
CIE Type: Direct

Luminaire Spacing Criteria: 1.1 - 0 Deg.
1.1 - 90 Deg.

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

DEG	CANDELA	LUMENS
0.0	90.0	
0	339.0	339.0
5	340.0	343.0
15	327.0	350.0
25	245.0	282.0
35	142.0	183.0
45	75.0	100.0
55	50.0	63.0
65	48.0	57.0
75	46.0	50.0
85	35.0	25.0
90	24.0	15.0
95	14.0	4.0
105	4.0	2.0
115	2.0	0.0
125	0.0	0.0
135	0.0	0.0



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	193.2	19.3	44.5
0-40	295.3	29.5	68.0
0-60	418.7	41.9	96.4
0-90	434.3	43.4	100.0
90-180	0.0	0.0	0.0
0-180	434.3	43.4	100.0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

	80				70				50				30				10				0	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
0	52	52	52	52	50	50	50	50	48	48	48	46	46	46	44	44	44	43				43
1	49	47	46	45	48	46	45	44	44	43	43	43	42	41	41	41	40	39				39
2	45	43	41	39	44	42	40	38	41	39	37	39	38	37	38	37	36	35				35
3	42	39	36	34	41	38	36	34	37	35	33	36	34	32	35	33	32	31				31
4	39	35	32	30	39	35	32	30	34	31	29	33	31	29	32	30	29	28				28
5	37	32	29	27	36	32	29	26	31	28	26	30	28	26	29	27	26	25				25
6	34	29	26	24	34	29	26	24	28	26	24	28	25	23	27	25	23	23				23
7	32	27	24	22	31	27	24	22	26	23	21	26	23	21	25	23	21	20				20
8	30	25	22	20	29	25	22	20	24	21	19	24	21	19	23	21	19	19				19
9	28	23	20	18	28	23	20	18	22	20	18	22	20	18	22	20	18	17				17
10	27	22	19	17	26	21	18	16	21	18	16	21	18	16	20	18	16	16				16

Catalog Number: TG/TT-658H-CO-PL9
Lamp: Phosphor Coated Metal Halide

Reflector: Stucco textured aluminum reflector, specular aluminum parabolic 9-cell louver with clear flat prismatic glass overlay

Lumens: Per 1,000 lamp lumens

Efficiency: 43.4%

CIE Type: Direct

Luminaire Spacing Criteria: 1.1 - 0 Deg.
1.2 - 90 Deg.

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

DEG	CANDELA	LUMENS
0.0	90.0	
0	250.9	251.0
5	249.2	250.0
15	237.4	247.0
25	202.1	222.0
35	148.7	170.0
45	89.7	111.0
55	44.8	54.0
65	10.5	13.0
75	1.4	2.0
85	0.0	0.0
90	0.0	0.0

