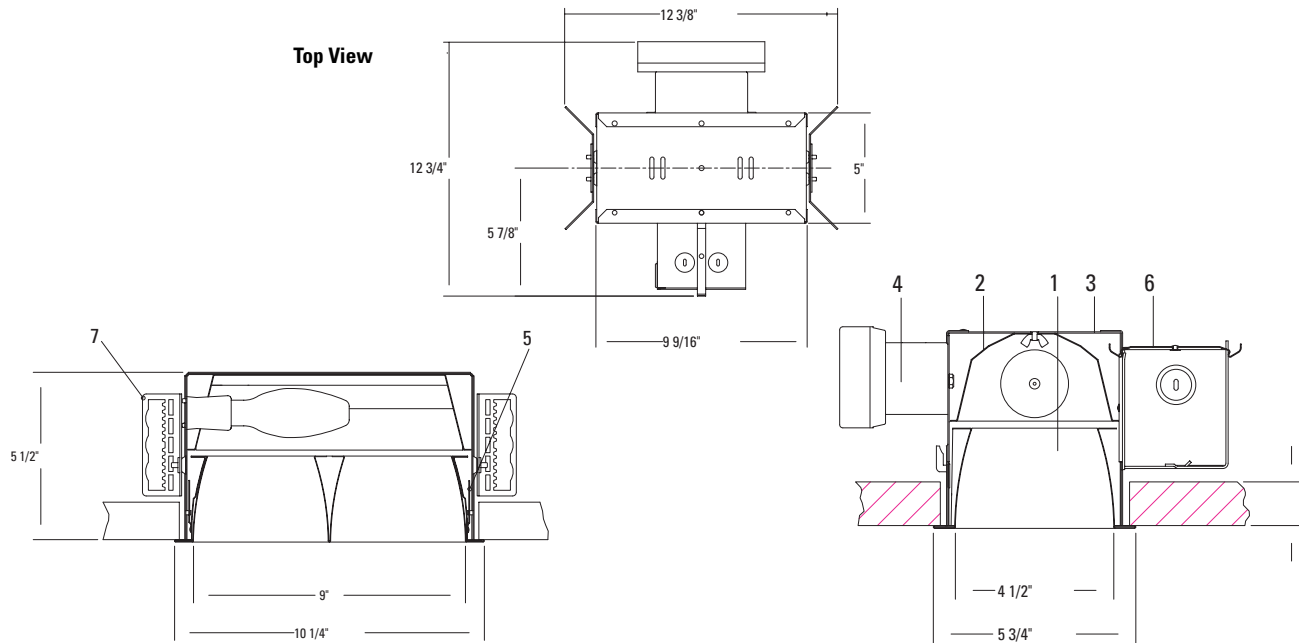




# Calculite® Matrix® HID Open Downlight 4X9HID



Ceiling Cutout: 5 1/8" L X 9 5/8" W

Reflector Trims	Finish / Flange	Frame-In Kits	Lamps
4X9CLW	Specular Clear / White	4X9170E17E1 Electronic 120V	70W ED17
4X9CLP	Specular Clear / Polished	4X917E17E2 Electronic 277V	
4X9CCLW	Comfort Clear / White		
4X9CCLP	Comfort Clear / Polished		
4X9CCDW	Comfort Clear Diff. / White		
4X9CCDP	Comfort Clear Diff. / Polished		
4X9CCGP	Clear Corrugated / Self Flange		
4X9VHW	White / White		

## Features

- 1. Reflector Trim:** Pre-finished aluminum with low iridescence clear finish. 55° visual and reflected cutoff. Overlap flange accommodates different ceiling types. Precision mitered flange corners.
- 2. Upper Reflector:** High efficiency, 97%, Specular Clear.
- 3. Housing:** 20 Ga. galvanized formed steel. Centerline notches and holes for consistent alignment of multiple fixtures. Accommodates ceilings up to 1 1/4" thick.
- 4. Ballast Assembly:** Door-mounted for easy service, allows replacement from inside of fixture.
- 5. Torsionite Springs:** Precision-tooled steel springs secure reflector trim to housing for quick tool-less installation. Positive tension holds flange tight against ceiling.
- 6. J-Box:** 14 Ga. galvanized steel. Accessible from inside and outside of the fixture. Outside J-box door is hinged for easy access.
- 7. Mounting Brackets:** 16 Ga. steel. Adjustable from inside fixture. Utilize 3/4" or 1 1/2" lathing channel, 1/2" EMT, or optional mounting bars.

## Options & Accessories

**Mounting Bars / T-Bar Anchor Clips:** See specification sheet "MBA".

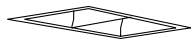
## Electrical

UL Listed for through circuit wiring with max of (8) No. 12 AWG, 90° C supply conductors.

## General

UL listed for damp locations. I.B.E.W. Union Made.

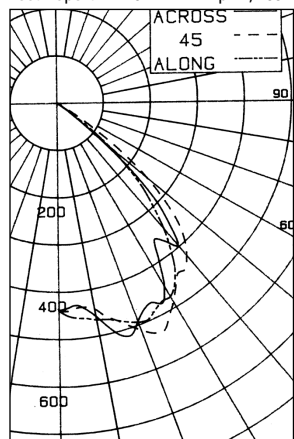
Job Information	Type:
<b>Job Name:</b>	
<b>Cat. No.:</b>	
<b>Lamp(s):</b>	
<b>Notes:</b>	



### 26W Quad Tube, Specular Clear Reflector Trim

One Sylvania lamp, 1800 lumens

Test Report 1762FR Apr. 4, 2002



#### CANDLEPOWER SUMMARY

Angle	Along	22.5	45	67.5	Across	Lumens
0	439	439	439	439	439	
5	457	450	435	437	429	42
10	466	448	443	462	459	
15	477	455	477	510	510	136
20	495	472	513	524	492	
25	485	478	532	489	467	228
30	475	474	488	503	450	
35	432	478	443	414	356	274
40	349	450	424	350	397	
45	256	350	361	344	296	243
50	144	203	248	182	119	
55	38	60	106	43	27	72
60	3	5	19	3	2	
65	1	1	1	1	1	3
70	1	1	0	0	1	
75	0	0	0	0	0	0
80	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	0

#### ZONAL LUMENS AND PERCENTAGES

Zone	Lumens	% Lamp	% Luminaire
0-30	406	22.58	10.72
0-40	680	37.81	68.17
0-60	995	55.31	99.71
0-90	998	55.47	100.00

EFFICIENCY = 55.5% Spacing Criterion: Along = 1.5 Across = 1.3

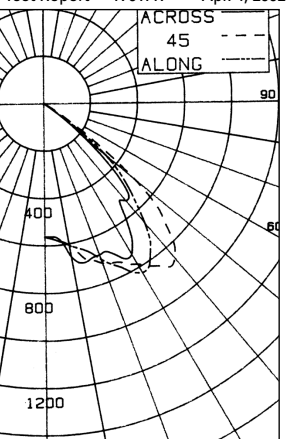
CU	% Effective Ceiling Cavity Reflectance																		
	80			70			50			30			10			0			
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
1	.61	.60	.58	.60	.59	.57	.58	.56	.56	.55	.55	.54	.54	.53	.52	.51			
2	.56	.54	.52	.55	.53	.51	.54	.52	.50	.52	.51	.49	.50	.49	.48	.47			
3	.52	.49	.46	.51	.48	.46	.50	.47	.45	.48	.46	.45	.47	.45	.44	.43			
4	.48	.44	.42	.47	.44	.41	.46	.43	.41	.45	.42	.41	.44	.42	.40	.39			
5	.44	.40	.38	.43	.40	.37	.42	.39	.37	.41	.39	.37	.40	.38	.36	.35			
6	.40	.36	.34	.40	.36	.34	.39	.36	.33	.38	.35	.33	.37	.35	.33	.32			
7	.37	.33	.30	.36	.32	.30	.35	.32	.30	.35	.32	.29	.34	.31	.29	.28			
8	.33	.29	.27	.33	.29	.27	.32	.29	.26	.32	.29	.26	.31	.28	.26	.25			
9	.30	.26	.24	.30	.26	.24	.29	.26	.23	.29	.26	.23	.28	.25	.23	.22			
10	.27	.24	.21	.27	.24	.21	.27	.23	.21	.26	.23	.21	.26	.23	.21	.20			

20% Floor Cavity Reflectance

### 32W Triple Tube, Specular Clear Reflector Trim

One Philips lamp, 2400 lumens

Test Report 1761FR Apr. 4, 2002



#### CANDLEPOWER SUMMARY

Angle	Along	22.5	45	67.5	Across	Lumens
0	563	563	563	563	563	
5	580	582	578	575	567	56
10	608	608	608	643	658	
15	640	631	683	706	691	189
20	702	691	719	691	681	
25	765	775	740	675	705	342
30	827	874	786	726	738	
35	782	861	842	705	605	480
40	658	779	858	619	538	
45	505	607	725	610	458	449
50	341	386	499	407	221	
55	85	113	169	114	50	143
60	5	8	33	9	4	
65	2	2	3	2	2	5
70	1	1	1	1	1	
75	0	0	0	0	0	0
80	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	0

#### ZONAL LUMENS AND PERCENTAGES

Zone	Lumens	% Lamp	% Luminaire
0-30	586	24.43	35.24
0-40	1066	44.42	64.10
0-60	1658	69.09	99.70
0-90	1663	69.30	100.00

EFFICIENCY = 69.3% Spacing Criterion: Along = 1.7 Across = 1.5

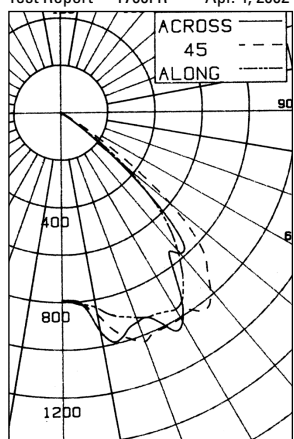
CU	% Effective Ceiling Cavity Reflectance																		
	80			70			50			30			10			0			
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
1	.76	.74	.72	.75	.73	.71	.72	.70	.69	.69	.68	.67	.67	.66	.65	.64			
2	.70	.67	.64	.69	.66	.63	.66	.64	.62	.64	.62	.61	.62	.61	.59	.58			
3	.64	.60	.57	.63	.59	.56	.61	.58	.55	.59	.57	.54	.58	.56	.54	.52			
4	.59	.54	.51	.58	.54	.50	.56	.53	.55	.55	.52	.49	.53	.51	.49	.47			
5	.53	.49	.45	.53	.48	.45	.51	.47	.44	.50	.47	.44	.49	.46	.44	.42			
6	.49	.44	.40	.48	.43	.40	.47	.43	.40	.46	.42	.39	.45	.41	.39	.38			
7	.44	.39	.35	.43	.38	.35	.42	.38	.35	.41	.37	.34	.40	.37	.34	.33			
8	.39	.34	.31	.39	.34	.31	.38	.34	.31	.37	.33	.30	.37	.33	.30	.29			
9	.36	.30	.27	.35	.30	.27	.34	.30	.27	.34	.29	.26	.33	.29	.26	.25			
10	.32	.27	.23	.31	.27	.23	.31	.26	.23	.30	.26	.23	.30	.26	.23	.22			

20% Floor Cavity Reflectance

### 42W Triple Tube, Specular Clear Reflector Trim

One Philips lamp, 3200 lumens

Test Report 1760FR Apr. 4, 2002



#### CANDLEPOWER SUMMARY

Angle	Along	22.5	45	67.5	Across	Lumens
0	792	792	792	792	792	
5	812	812	810	812	802	79
10	835	838	866	926	939	
15	890	895	973	1010	982	266
20	922	959	1028	966	939	
25	939	1019	1006	952	978	458
30	961	1054	1003	1043	1021	
35	896	1060	1027	929	828	600
40	762	955	976	724	781	
45	594	761	854	701	646	536
50	344	464	600	405	285	
55	80	144	243	115	70	169
60	7	11	45	8	5	
65	2	2	3	2	2	6
70	1	1	1	1	1	
75	1	1	1	0	0	0
80	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	0

#### ZONAL LUMENS AND PERCENTAGES

Zone	Lumens	% Lamp	% Luminaire
0-30	803	25.10	38.00
0-40	1402	43.84	66.36
0-60	2107	65.87	99.70
0-90	2113	66.06	100.00

EFFICIENCY = 66.1% Spacing Criterion: Along = 1.6 Across = 1.5

CU	% Effective Ceiling Cavity Reflectance																		
	80			70			50			30			10			0			
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
1	.72	.71	.69	.71	.69	.68	.68	.67	.66	.66	.65	.64	.64	.63	.62	.61			
2	.67	.64	.61	.66	.63	.61	.63	.61	.59	.62	.60	.58	.60	.58	.57	.56			
3	.61	.58	.55	.60	.57	.54	.59	.56	.53	.57	.55	.52	.55	.53	.52	.51			
4	.56	.52	.49	.56	.52	.49	.54	.51	.48	.53	.50	.48	.51	.49	.47	.46			
5	.52	.47	.44	.51	.47	.44	.50	.46	.43	.48	.45	.43	.47	.45	.42	.41			
6	.47	.42	.39	.46	.42	.39	.45	.42	.39	.44	.41	.38	.43	.40	.38	.37			
7	.43	.38	.35	.42	.38	.34	.41	.37	.34	.40	.37	.34	.39	.36	.34	.33			
8	.39	.34	.30	.38	.34	.30	.37	.33	.30	.37	.33	.30	.36	.32	.30	.29			
9	.35	.30	.27	.35	.30	.27	.34	.30	.27	.33	.29	.26	.32	.29	.26	.25			
10	.32	.27	.24	.31	.27	.24	.31	.26	.23	.30	.26	.23	.29	.26	.23	.22			

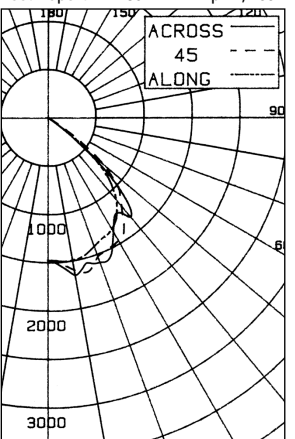
20% Floor Cavity Reflectance

20% Floor Cavity Reflectance

### 57W Triple Tube, Specular Clear Reflector Trim

One Sylvania lamp, 4300 lumens

Test Report 1759FR Apr. 4, 2002



#### CANDLEPOWER SUMMARY

Angle	Along	22.5	45	67.5	Across	Lumens
0	1474	1474	1474	1474	1474	
5	1488	1497	1515	1532	1535	145
10	1490	1531	1597	1642	1651	
15	1469	1522	1641	1588	1551	443
20	1409	1504	1523	1598	1587	
25	1361	1469	1490	1603	1559	690
30	1324	1418	1465	1461	1365	
35	1244	1329	1380	1267	1218	821
40	1100	1248	1183	1153	1339	
45	887	1037	1038	1112	1069	761
50	554	649	749	654	508	
55	145	219	333	176	105	246
60	7	13	61	10	6	
65	1	1	3	2	1	6
70	0	0	0	0	0	0
75	0	0	0	0	0	0
80	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	0

#### ZONAL LUMENS AND PERCENTAGES

Zone	Lumens	% Lamp	% Luminaire
0-30	1277	29.72	41.07
0-40	2098	48.81	67.45
0-60	3105	72.21	99.79
0-90	3111	72.36	100.00

EFFICIENCY = 72.4% Spacing Criterion: Along = 1.3 Across = 1.3