



PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

REPORT NUMBER: ITL92550-GONIOPHOTOMETRY

PAGE: 1 OF 7

ISSUE DATE: 11/21/19

PREPARED FOR: FINELITE, INC.

ADDRESS: 30500 WHIPPLE ROAD
UNION CITY, CA 94587

CATALOG NUMBER: HP-X ID-4ft-V-V-835-TG-F

LUMINAIRE: EXTRUDED WHITE PAINTED METAL HOUSING WITH CAST WHITE PAINTED METAL END CAPS AND 2 DISTINCT OPTICAL COMPARTMENTS, TOP OPTICAL COMPARTMENT CONSISTS OF: 2-PIECE FABRICATED DIFFUSE METAL CIRCUIT BOARD MOUNTING STRIP, 2 CIRCUIT BOARDS EACH WITH 80 LEDS, 3-PIECE EXTRUDED TRANSLUCENT PLASTIC DROP DIFFUSER. BOTTOM OPTICAL COMPARTMENT CONSISTS OF: 2-PIECE FLAT METAL CIRCUIT BOARD MOUNTING PLATE, 4 CIRCUIT BOARDS EACH WITH 120 LEDS, EXTRUDED PLASTIC REFLECTOR/LENS ASSEMBLY WITH WHITE REFLECTOR AND A TRANSLUCENT WHITE FROSTED PLASTIC DIFFUSER. BOTTOM AND TOP DIFFUSERS FROSTED BOTH SIDES.

LAMPS: SIX HUNDRED FORTY WHITE LIGHT EMITTING DIODES (LEDS), 160 VERTICAL BASE-DOWN POSITION, 480 VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 277.0 VOLTS, 69.1 WATTS, 0.269 AMPS

MOUNTING: SUSPENDED

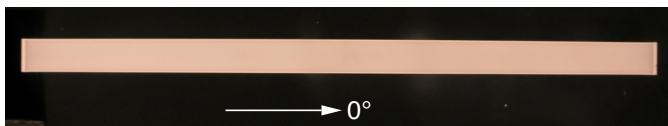
LED DRIVERS: TWO OSRAM OTi 50/120-277/1A4 DIM-1 L G2, DRIVERS HAVE MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, CLIENT STATES EACH DRIVER PROGRAMMED FOR 700mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (277VAC, 60Hz) TO THE DRIVERS.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

THIS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.



Approved C STOUT

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CATALOG NUMBER: HP-X ID-4'-V-V-835-TG-F-277V-X-X-X

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	
0	1378	1378	1378	1378	1378	
5	1371	1372	1372	1372	1372	130
15	1327	1318	1326	1327	1323	374
25	1234	1221	1232	1233	1230	566
35	1097	1087	1096	1095	1092	684
45	923	919	927	931	929	714
55	727	722	734	740	743	655
65	509	510	526	536	541	518
75	287	297	316	332	337	333
85	86	102	125	145	152	137
90	2	23	51	74	82	
95	69	85	108	130	137	119
105	237	249	270	291	298	286
115	441	445	468	483	489	462
125	672	667	684	695	702	612
135	912	903	916	922	926	706
145	1147	1129	1142	1141	1141	712
155	1347	1328	1337	1332	1329	614
165	1485	1474	1478	1476	1470	416
175	1554	1554	1554	1554	1554	147
180	1564	1564	1564	1564	1564	

FLUX

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	1071	13.1
0- 40	1754	21.4
0- 60	3123	38.2
0- 90	4111	50.2
90-120	866	10.6
90-130	1478	18.1
90-150	2896	35.4
90-180	4073	49.8
0-180	8184	100.0

EFFICACY (277) = 118.4 lm/W

EFFICACY (120) = 118.8 lm/W **

** THE EFFICACY AT 120 VOLTS IS BASED ON THE LUMENS FROM THIS REPORT AND THE WATTAGE MEASURED AT 120 VOLTS FROM ITL REPORT NUMBER ITL92550-SPHERE.

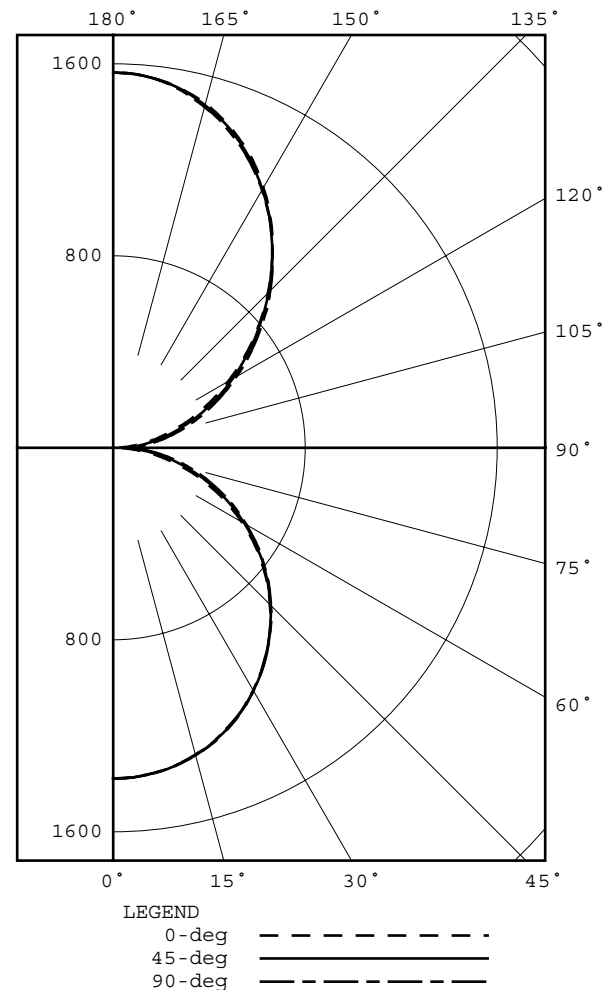
CIE TYPE - GENERAL DIFFUSE

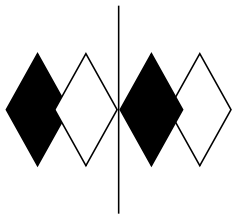
PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.26 1.26

BEAM ANGLE (50%) : 100.8 X 102.8 DEGREES

FIELD ANGLE (10%) : 159.2 X 167.3 DEGREES





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CATALOG NUMBER: HP-X ID-4'-V-V-835-TG-F-277V-X-X-X

PLANE : 0-DEG 90-DEG
LUMINOUS LENGTH : 48.000 2.375

LUMINANCE DATA IN CANDELA/SQ M				
ANGLE	AVERAGE	AVERAGE	AVERAGE	
IN DEG	0-DEG	45-DEG	90-DEG	
45	17748.	17825.	17863.	
55	17233.	17399.	17613.	
65	16376.	16923.	17405.	
75	15077.	16600.	17704.	
85	13416.	19500.	23712.	



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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0
0.0	1378	1378	1378	1378	1378
5.0	1371	1372	1372	1372	1372
10.0	1355	1352	1355	1355	1355
15.0	1327	1318	1326	1327	1323
20.0	1287	1275	1284	1286	1282
25.0	1234	1221	1232	1233	1230
30.0	1169	1157	1168	1168	1166
35.0	1097	1087	1096	1095	1092
40.0	1013	1004	1014	1015	1015
45.0	923	919	927	931	929
50.0	828	823	833	839	839
55.0	727	722	734	740	743
60.0	618	615	632	639	641
65.0	509	510	526	536	541
70.0	398	401	420	432	437
75.0	287	297	316	332	337
80.0	185	196	218	235	241
85.0	86	102	125	145	152
90.0	2	23	51	74	82
95.0	69	85	108	130	137
100.0	150	162	184	205	213
105.0	237	249	270	291	298
110.0	338	344	365	384	391
115.0	441	445	468	483	489
120.0	553	555	574	588	593
125.0	672	667	684	695	702
130.0	791	784	798	808	812
135.0	912	903	916	922	926
140.0	1032	1019	1030	1034	1033
145.0	1147	1129	1142	1141	1141
150.0	1252	1236	1243	1243	1240
155.0	1347	1328	1337	1332	1329
160.0	1423	1408	1416	1412	1406
165.0	1485	1474	1478	1476	1470
170.0	1528	1525	1526	1525	1522
175.0	1554	1554	1554	1554	1554
180.0	1564	1564	1564	1564	1564



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	33
5- 10	98
10- 15	159
15- 20	215
20- 25	263
25- 30	303
30- 35	333
35- 40	351
40- 45	359
45- 50	355
50- 55	340
55- 60	315
60- 65	280
65- 70	238
70- 75	191
75- 80	141
80- 85	92
85- 90	45
90- 95	41
95-100	78
100-105	120
105-110	165
110-115	210
115-120	252
120-125	290
125-130	322
130-135	346
135-140	360
140-145	362
145-150	351
150-155	326
155-160	288
160-165	238
165-170	178
170-175	110
175-180	37

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	130
0- 20	504
0- 30	1071
0- 40	1754
0- 50	2468
0- 60	3123
0- 70	3642
0- 80	3974
0- 90	4111
0-100	4230
0-110	4516
0-120	4977
0-130	5589
0-140	6295
0-150	7007
0-160	7621
0-170	8037
0-180	8184



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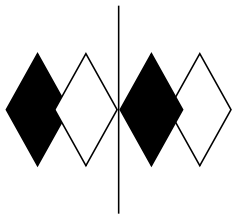
CATALOG NUMBER: HP-X ID-4'-V-V-835-TG-F-277V-X-X-X

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	46	41
2	88	81	74	69	81	74	69	64	63	59	55	52	49	47	43	41	39	34
3	80	71	63	57	74	65	59	53	55	50	46	46	42	39	38	35	33	28
4	73	62	54	48	67	58	51	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	17	15	13
10	46	34	27	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.



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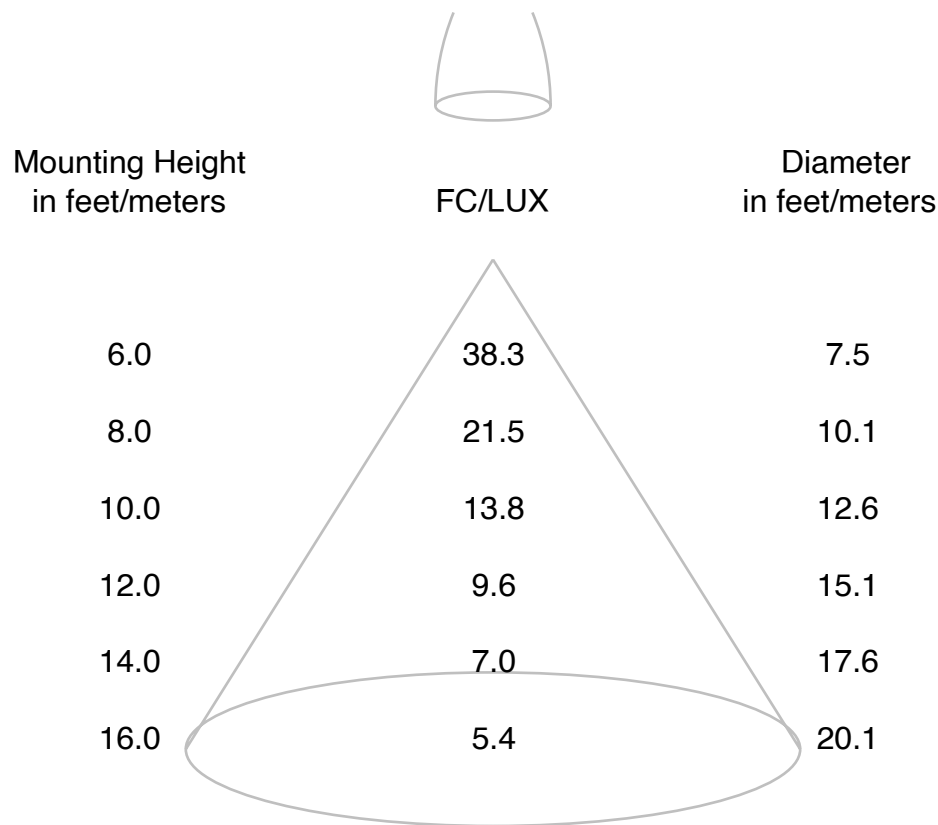
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CONE OF LIGHT DIAGRAM

(diameter shown is where fc/lux value is half the fc/lux at nadir)



If distances are feet, results are footcandles.
If distances are meters, results are lux.

Note: The candela values used to generate this diagram were obtained by averaging the photometric data into a single plane.