Lumentra

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TEST REPORT NO. N246C

MPS COMPANY LED FLOODLIGHT CAT. NO. W/B 14-02-#2
WITH INDIVIDUAL LED LENS OPTICS (COMMERCIAL) AND REFLECTORS
30 WHITE LEDS. LUMEN OUTPUT = 2646 LMS.
MEAN WELL 100-277V LED DRIVER MODEL HLG-40H-48A

FLOODLIGHT SUMMARY:

FIELD ANGLE	74.7H	X	57.6V
(BASED ON 10% OF MAX. CP.)			
BEAM ANGLE	43.1H	X	32.2V
(BASED ON 50% OF MAX. CP.)			
NEMA TYPE	5H	X	4V
MAX. CANDLEPOWER	5138 CANDELA		
MAX. CP. VERT. ANGLE	2.5 DEGREES		
MAX. CP. HORIZ. ANGLE	.2 DEGREES		
AVG. MAX. CANDLEPOWER	4610 CANDELA		
FIELD FLUX	2104.5 LUMENS		
FIELD EFFICACY	54.9 LMS/WATT		
BEAM FLUX	1424.0 LUMENS		
BEAM EFFICACY	37.2 LMS/WATT		
TOTAL FLUX	2646.4 LUMENS		
TOTAL EFFICACY	69.1 LMS/WATT		

PREPARED FOR:

MPS COMPANY INC.
TORONTO, ONTARIO

DATE: Aug 7 2020

The above tabulation is computed in accordance with IES publication no. LM-35-2002, and defines the beam from the 50% maximum candlepower points and the field from the 10% maximum candlepower points. LM-35-2002 supersedes the 1970 document which defines the beam from the 10% maximum candlepower points.

Laboratory result may not be representative of field performance.
ABSOLUTE PHOTOMETRY TAKEN.
TESTED IN ACCORDANCE WITH IES LM-79-2019 SEC. 10

ACCREDITED BY NVLAP (LAB CODE 500084-0) TO ISO/IES 17025:2017 FOR IES LM-79-19

LUMENTRA, INC.
160 FROBISHER DRIVE, UNIT 5
WATERLOO, ONTARIO

TEST REPORT NO. N246C

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MEAN WELL 100-277V LED DRIVER MODEL HLG-40H-48A

CANDLEPOWER TRACE THROUGH ORIGIN

VERTICAL TRACE		CANDELA		HORIZONTAL TRACE			
ANGLE	CANDLEPOWER	ANGLE	CANDLEPOWER	ANGLE	CANDLEPOWER	ANGLE	CANDLEPOWER
90.0	1.	.0	5037.	90.0	2.	.0	5037.
87.0	1.	-3.0	4535.	87.0	3.	-3.0	4940.
84.0	2.	-6.0	3779.	84.0	8.	-6.0	4836.
81.0	4.	-9.0	2837.	81.0	19.	-9.0	4668.
78.0	8.	-12.0	1836.	78.0	34.	-12.0	4354.
75.0	22.	-15.0	1061.	75.0	53.	-15.0	3902.
72.0	42.	-18.0	628.	72.0	74.	-18.0	3325.
69.0	57.	-21.0	363.	69.0	100.	-21.0	2676.
66.0	73.	-24.0	248.	66.0	125.	-24.0	2040.
63.0	92.	-27.0	196.	63.0	150.	-27.0	1485.
60.0	130.	-30.0	153.	60.0	178.	-30.0	1045.
57.0	187.	-33.0	116.	57.0	207.	-33.0	745.
54.0	238.	-36.0	83.	54.0	237.	-36.0	558.
51.0	274.	-39.0	63.	51.0	267.	-39.0	446.
48.0	301.	-42.0	49.	48.0	296.	-42.0	376.
45.0	341.	-45.0	39.	45.0	331.	-45.0	331.
42.0	398.	-48.0	32.	42.0	376.	-48.0	296.
39.0	482.	-51.0	27.	39.0	446.	-51.0	267.
36.0	614.	-54.0	24.	36.0	558.	-54.0	237.
33.0	833.	-57.0	21.	33.0	745.	-57.0	207.
30.0	1170.	-60.0	19.	30.0	1045.	-60.0	178.
27.0	1648.	-63.0	19.	27.0	1485.	-63.0	150.
24.0	2230.	-66.0	18.	24.0	2040.	-66.0	125.
21.0	2861.	-69.0	16.	21.0	2676.	-69.0	100.
18.0	3541.	-72.0	15.	18.0	3325.	-72.0	74.
15.0	4116.	-75.0	13.	15.0	3902.	-75.0	53.
12.0	4535.	-78.0	9.	12.0	4354.	-78.0	34.
9.0	4849.	-81.0	5.	9.0	4668.	-81.0	19.
6.0	5049.	-84.0	2.	6.0	4836.	-84.0	8.
3.0	5114.	-87.0	0.	3.0	4940.	-87.0	3.
.0	5037.	-90.0	0.	.0	5037.	-90.0	2.

- UPPER - - LOWER - - RIGHT - - LEFT -

POLAR AXIS HORIZONTAL

TEST REPORT NO. N246C

MPS COMPANY LED FLOODLIGHT CAT. NO. W/B 14-02-#2
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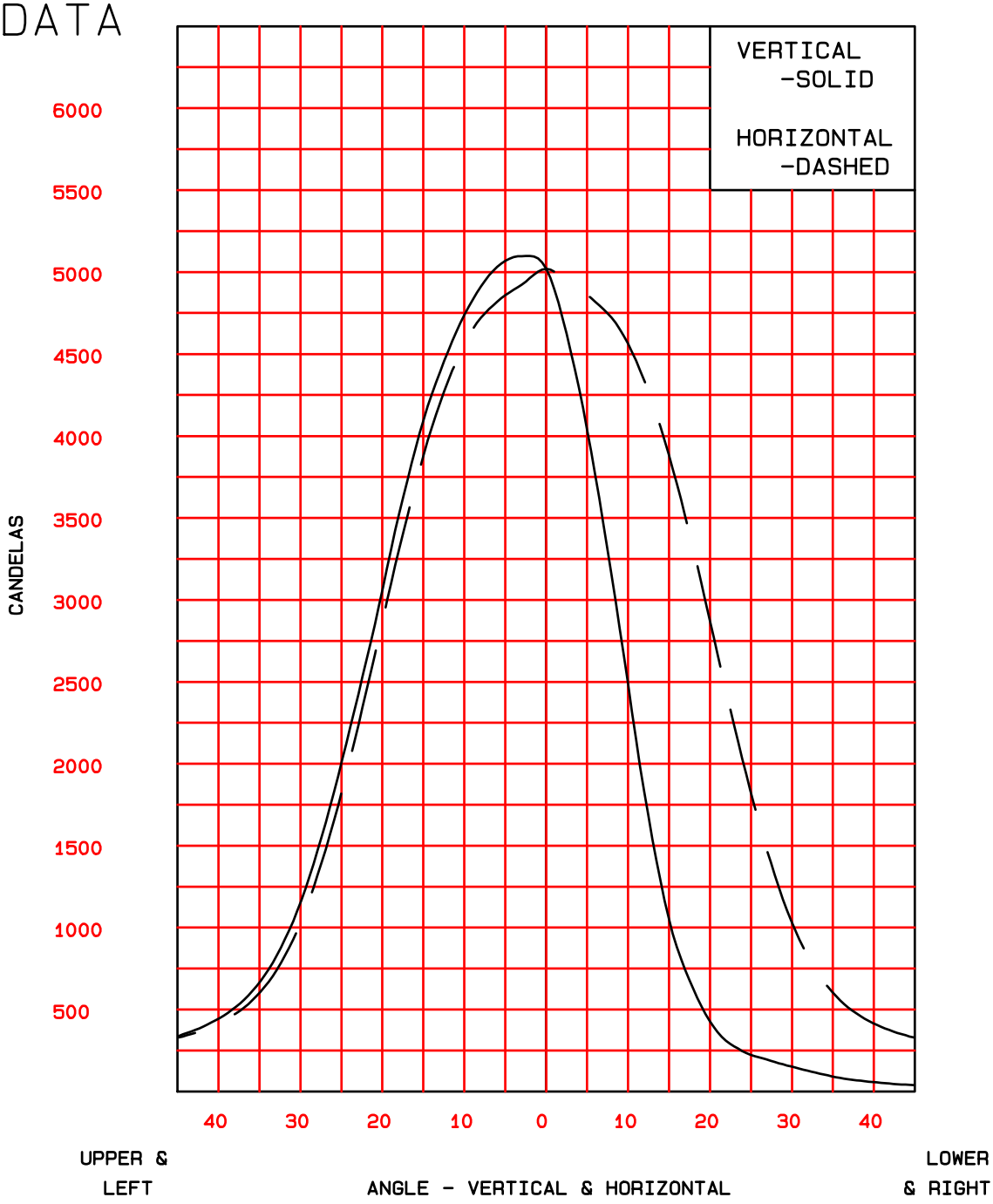
30 WHITE LEDS. LUMEN OUTPUT = 2646 LMS.
MEAN WELL 100-277V LED DRIVER MODEL HLG-40H-48A

FLOODLIGHT DATA

CANDLEPOWER TRACE THROUGH ORIGIN



TEST REPORT NO. N246C

FLOODLIGHT DATA

MPS COMPANY LED FLOODLIGHT CAT. NO. W/B 14-02-#2
WITH INDIVIDUAL LED LENS OPTICS (COMMERCIAL) AND REFLECTORS
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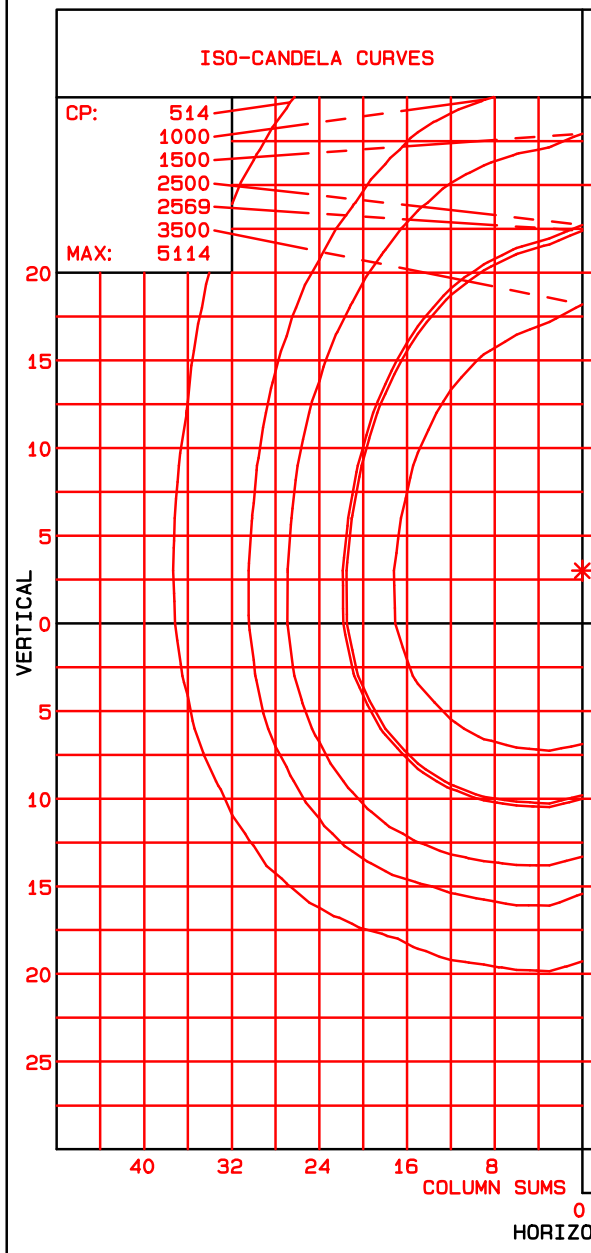
ISOCANDELA DIAGRAM



LUMEN DISTRIBUTION						ROW SUMS
17	14	9	6	4	3	56
29	23	13	7	4	3	83
41	33	20	9	5	3	115
52	43	26	11	5	3	145
58	50	31	13	5	3	165
61	53	33	14	6	3	173
56	49	31	14	5	3	161
42	36	23	10	4	3	121
22	20	13	7	3	2	70
9	8	6	4	3	2	33
4	3	3	2	2	1	18
2	2	2	2	1	1	12
430	368	240	123	66	42	1323

TEST REPORT NO. N246C
STANDARD TABLE OF CANDELAS AND LUMENS, IN ACCORDANCE WITH IES PROCEDURES

ANGULAR DATA IS SHOWN WITH THE POLAR AXIS HORIZONTAL.

LUMINOUS INTENSITY IN CANDELAS AT CENTERS OF ZONES.
LUMINOUS FLUX IN LUMENS IN ZONES.
****** MULTIPLY CANDELAS BY 1 ******
LUMEN OUTPUT = 2646 LMS.

RIGHT HAND COLUMN SHOWS LUMEN TOTAL FOR ONE SIDE ONLY, 0 TO 90 DEGREES

VERT ANG.	HORIZONTAL ANGLE - DEGREES											
	0.	8.	16.	24.	32.	40.	48.	56.	64.	72.	80.	88.	
90.	1. .01	1. .01	1. .01	1. .01	1. .00	1. .01	1. .01	1. .01	1. .00	1. .00	2. .00	.06
85.	2. .03	2. .02	2. .02	2. .02	2. .02	2. .01	2. .01	2. .01	2. .01	2. .01	2. .00	.16
80.	8. .09	7. .08	6. .07	6. .07	4. .04	4. .04	4. .03	4. .02	3. .01	2. .01	2. .00	.47
75.	37. .45	34. .41	30. .34	26. .28	21. .21	17. .14	12. .09	9. .06	6. .03	4. .01	2. .00	2.02
70.	63. .76	60. .72	54. .62	48. .52	40. .40	32. .28	25. .18	18. .11	10. .05	5. .02	2. .00	3.66
65.	94. 1.14	92. 1.10	85. .97	75. .80	63. .62	51. .45	39. .29	30. .18	17. .08	8. .02	3. .00	5.67
60.	172. 2.08	165. 1.97	143. 1.63	123. 1.33	105. 1.03	85. .74	67. .50	48. .29	29. .13	12. .04	3. .00	9.76
55.	264. 3.21	265. 3.15	234. 2.68	200. 2.15	168. 1.65	136. 1.19	104. .78	75. .45	42. .19	18. .05	4. .01	15.51
50.	308. 3.74	314. 3.75	289. 3.31	249. 2.68	211. 2.07	174. 1.53	134. 1.00	97. .59	56. .26	23. .07	5. .01	19.01
45.	380. 4.61	384. 4.58	363. 4.15	308. 3.32	256. 2.52	211. 1.85	162. 1.22	117. .71	69. .31	29. .08	5. .01	23.36
40.	513. 6.23	494. 5.88	450. 5.15	373. 4.01	302. 2.97	246. 2.15	190. 1.43	135. .82	79. .36	34. .10	6. .01	29.11
35.	807. 9.80	711. 8.47	571. 6.53	442. 4.75	349. 3.43	274. 2.40	213. 1.59	149. .91	90. .41	38. .11	6. .01	38.42
30.	1428. 17.3	1164. 13.9	798. 9.1	535. 5.7	394. 3.9	296. 2.6	230. 1.7	162. 1.0	100. .5	42. .1	7. .0	55.9
25.	2354. 28.6	1902. 22.6	1176. 13.5	676. 7.3	438. 4.3	316. 2.8	246. 1.8	174. 1.1	108. .5	46. .1	7. .0	82.6
20.	3411. 41.4	2791. 33.2	1721. 19.7	863. 9.3	477. 4.7	334. 2.9	258. 1.9	183. 1.1	113. .5	48. .1	8. .0	115.0
15.	4272. 51.9	3637. 43.3	2279. 26.1	1065. 11.4	516. 5.1	348. 3.0	266. 2.0	187. 1.1	117. .5	49. .1	8. .0	144.7
10.	4785. 58.1	4185. 49.8	2711. 31.0	1243. 13.4	550. 5.4	353. 3.1	267. 2.0	187. 1.1	115. .5	48. .1	8. .0	164.7
5.	4992. 60.6	4424. 52.7	2916. 33.4	1331. 14.3	564. 5.6	350. 3.1	261. 2.0	181. 1.1	111. .5	47. .1	8. .0	173.3
0.	4578. 55.6	4088. 48.7	2716. 31.1	1261. 13.6	537. 5.3	334. 2.9	249. 1.9	172. 1.0	104. .5	44. .1	8. .0	160.7

-5.											
	3438.	3026.	1986.	958.	456.	303.	229.	158.	94.	40.	8.	
	41.8	36.0	22.7	10.3	4.5	2.7	1.7	1.0	.4	.1	.0	121.2
-10.												
	1840.	1643.	1140.	614.	350.	258.	198.	138.	83.	35.	7.	
	22.3	19.6	13.0	6.6	3.4	2.3	1.5	.8	.4	.1	.0	70.1
-15.												
	753.	669.	497.	348.	266.	211.	165.	115.	68.	29.	6.	
	9.14	7.97	5.69	3.74	2.62	1.85	1.24	.70	.31	.09	.01	33.35
-20.												
	308.	294.	258.	223.	195.	161.	127.	89.	53.	24.	6.	
	3.75	3.50	2.95	2.40	1.92	1.41	.95	.54	.24	.07	.01	17.75
-25.												
	197.	190.	175.	156.	136.	111.	89.	64.	40.	18.	5.	
	2.39	2.26	2.00	1.68	1.34	.98	.67	.39	.18	.05	.01	11.93
-30.												
	128.	123.	112.	101.	89.	74.	60.	44.	28.	14.	4.	
	1.56	1.46	1.28	1.08	.87	.65	.45	.27	.13	.04	.01	7.79
-35.												
	75.	73.	70.	64.	56.	49.	39.	29.	19.	10.	4.	
	.91	.87	.80	.69	.55	.43	.29	.18	.08	.03	.00	4.84
-40.												
	49.	48.	46.	42.	38.	32.	26.	20.	12.	7.	3.	
	.60	.57	.52	.46	.37	.28	.20	.12	.06	.02	.00	3.20
-45.												
	34.	33.	31.	29.	26.	22.	17.	14.	9.	5.	3.	
	.41	.39	.35	.31	.25	.19	.13	.08	.04	.02	.00	2.18
-50.												
	25.	25.	23.	21.	19.	16.	13.	10.	7.	5.	3.	
	.31	.29	.27	.23	.19	.14	.10	.06	.03	.01	.00	1.64
-55.												
	21.	21.	19.	18.	16.	13.	10.	8.	6.	4.	2.	
	.25	.24	.22	.19	.15	.12	.08	.05	.03	.01	.00	1.34
-60.												
	19.	18.	17.	15.	13.	11.	9.	7.	5.	3.	2.	
	.23	.21	.19	.16	.13	.10	.06	.04	.02	.01	.00	1.17
-65.												
	17.	16.	15.	13.	12.	10.	7.	6.	4.	3.	2.	
	.21	.20	.18	.14	.12	.08	.05	.03	.02	.01	.00	1.04
-70.												
	15.	15.	13.	12.	10.	8.	6.	4.	3.	2.	2.	
	.18	.17	.15	.13	.10	.07	.04	.03	.01	.01	.00	.89
-75.												
	10.	10.	9.	8.	6.	5.	4.	3.	2.	2.	1.	
	.13	.12	.10	.09	.06	.05	.03	.02	.01	.01	.00	.61
-80.												
	4.	4.	4.	3.	3.	2.	2.	1.	1.	1.	1.	
	.05	.05	.04	.03	.03	.02	.01	.01	.01	.00	.00	.24
-85.												
	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	
	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.04
-90.												
	430.	368.	240.	123.	66.	42.	28.	16.	7.	2.	0.	

BOTTOM ROW SHOWS LUMEN SUMMATION OF VERTICAL ZONES, +90 TO - 90 DEGREES

LUMENTRA, INC.
160 FROBISHER DRIVE, UNIT 5
WATERLOO, ONTARIO

TEST REPORT NO. N246C

MPS COMPANY LED FLOODLIGHT CAT. NO. W/B 14-02-#2
WITH INDIVIDUAL LED LENS OPTICS (COMMERCIAL) AND REFLECTORS
30 WHITE LEDS. LUMEN OUTPUT = 2646 LMS.
MEAN WELL 100-277V LED DRIVER MODEL HLG-40H-48A

AMBIENT TEMPERATURE: 25.0 °C
STABILIZATION TIME: 1 HOUR 10 MINUTES
THE LUMINAIRE WAS OPERATED IN THE ORIENTATION INDICATED BY THE PICTURES BELOW
LSI MOVING MIRROR GONIOPHOTOMETER 6240T WAS USED

ELECTRICAL CONSUMPTION

INPUT VOLTAGE: 120.0 VRMS
INPUT CURRENT: 0.320 ARMS
INPUT WATTAGE: 38.30
POWER FACTOR: 0.997
THDi: 5.46

	
SIDE VIEW	VIEWED FROM BELOW
	
FRONT VIEW	VIEWED FROM ABOVE

Prepared By:

Charles Sisson
Senior Technologist

END OF REPORT