

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P883436

Luminaire Tested: **NAV-SB3D-740-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24030 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

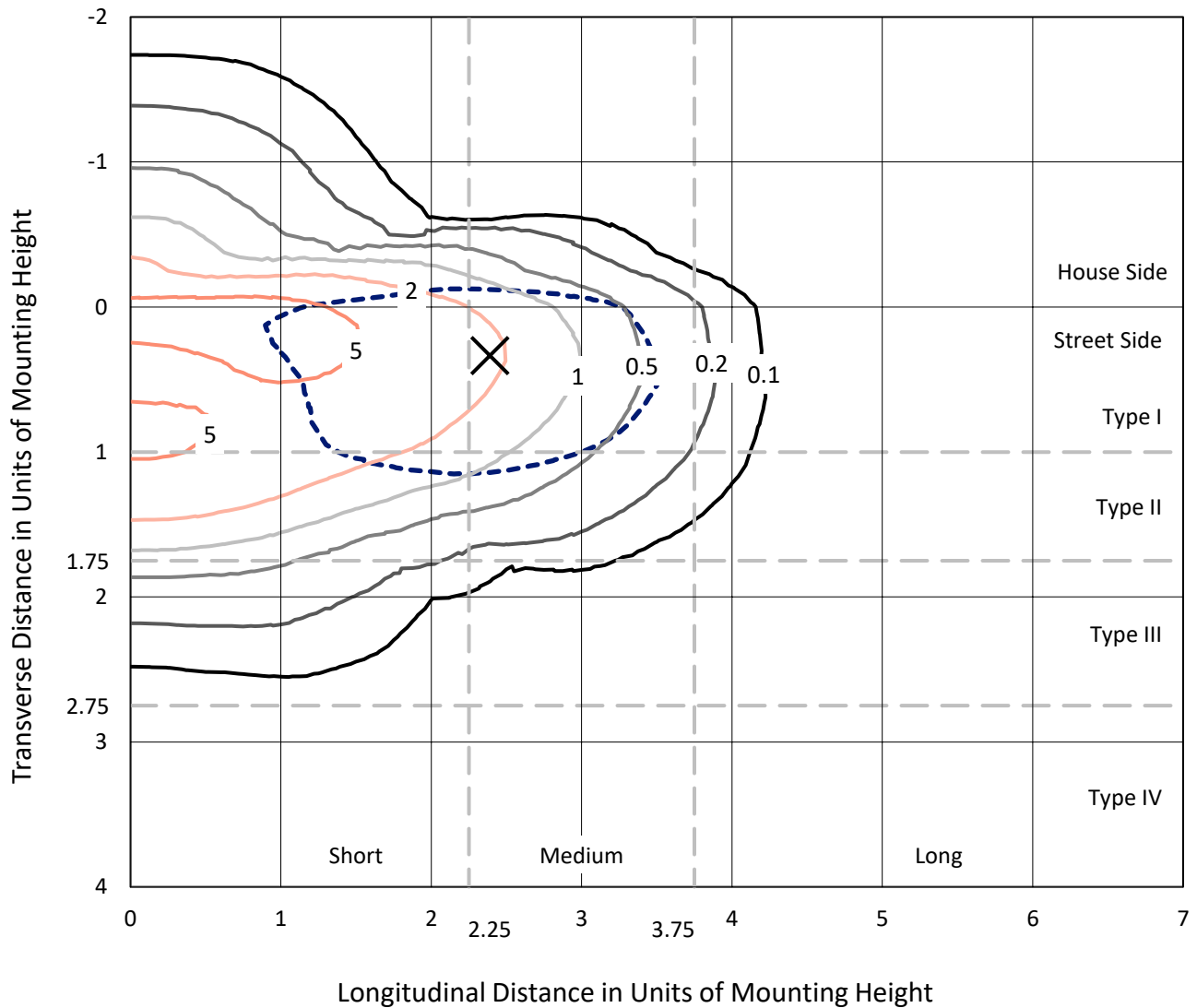
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

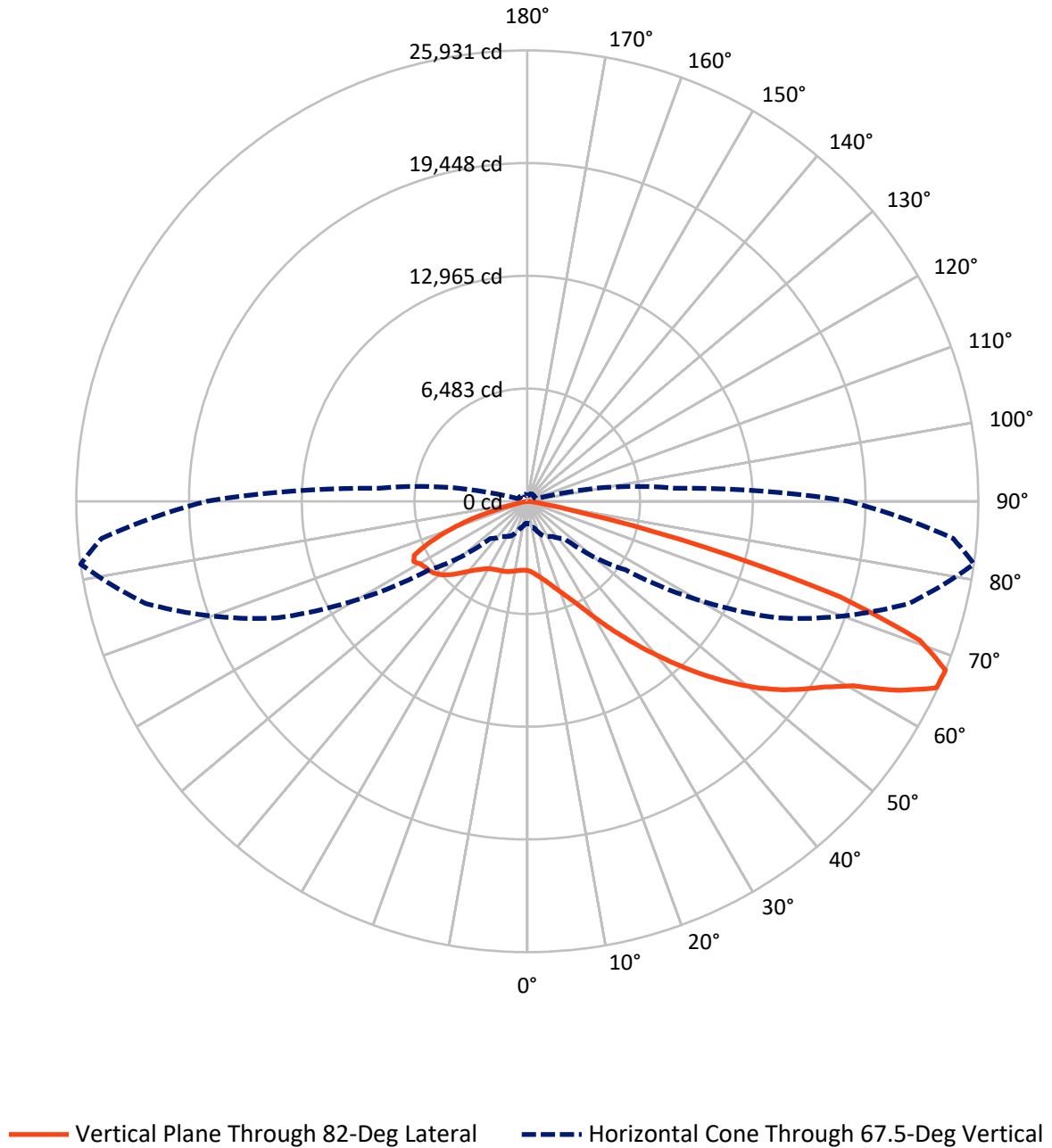
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4352.8	0.0	4352.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	19677.2	0.0	19677.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	24030.0	0.0	24030.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.7	1.5
10°-20°	921.7	3.8
20°-30°	1476.2	6.1
30°-40°	2610.4	10.9
40°-50°	4573.6	19.0
50°-60°	6099.9	25.4
60°-70°	5678.7	23.6
70°-80°	2179.5	9.1
80°-90°	135.4	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24030.0	100.0
0°-180°	24030.0	100.0

Coefficient of Utilization



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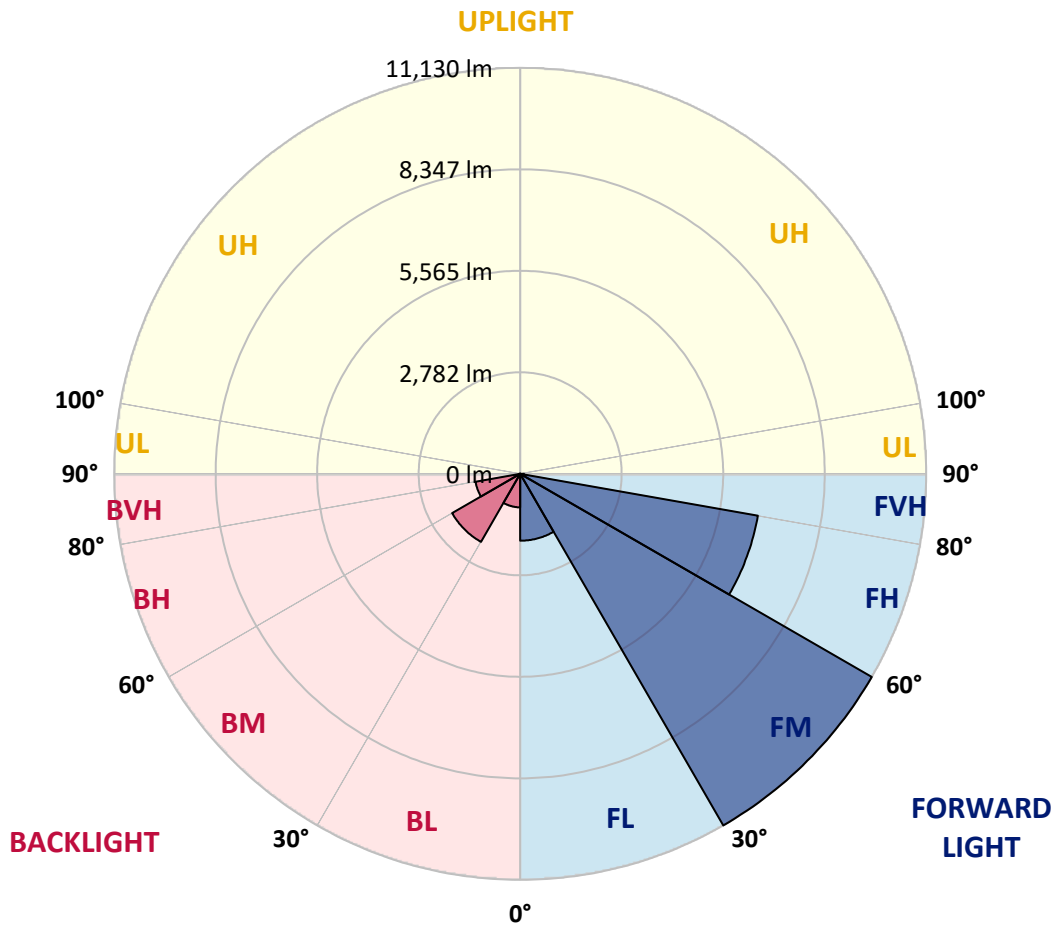
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1833.2	7.6			
FM (30°-60°)	11129.7	46.3			
FH (60°-80°)	6615.8	27.5			G3/7500
FVH (80°-90°)	98.4	0.4			G1/100
BL (0°-30°)	919.3	3.8	B2/1000		
BM (30°-60°)	2154.2	9.0	B2/2500		
BH (60°-80°)	1242.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	37.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0
2.5°	4207.6	4231.8	4218.0	4211.1	4199.0	4181.6	4167.8	4124.6	4079.6	4050.2	4039.8
5°	4292.4	4316.6	4314.9	4321.8	4330.4	4335.6	4332.2	4283.7	4219.7	4169.5	4140.1
7.5°	4219.7	4247.4	4269.9	4304.5	4365.0	4429.1	4460.2	4449.8	4384.1	4314.9	4278.5
10°	4013.8	4043.2	4096.9	4178.2	4306.2	4444.6	4560.5	4614.2	4572.7	4496.5	4446.4
12.5°	3636.7	3666.1	3771.6	3948.1	4162.6	4403.1	4624.6	4768.2	4778.5	4702.4	4643.6
15°	3212.8	3242.2	3354.7	3576.1	3903.1	4288.9	4659.2	4930.8	5022.5	4956.7	4885.8
17.5°	2949.8	2975.8	3060.5	3238.7	3579.6	4060.5	4647.0	5103.8	5313.1	5261.2	5176.5
20°	2870.2	2892.7	2932.5	3057.1	3340.8	3823.5	4567.5	5266.4	5626.3	5596.9	5501.7
22.5°	2955.0	2975.8	2987.9	3043.2	3221.4	3667.8	4467.1	5432.5	5989.6	5993.1	5877.1
25°	3150.5	3171.3	3157.4	3192.0	3269.9	3619.4	4429.1	5628.0	6446.3	6484.4	6352.9
27.5°	3472.3	3474.0	3441.2	3439.4	3451.5	3692.0	4468.8	5837.4	7022.5	7093.4	6930.8
30°	4117.6	4091.7	3965.4	3828.7	3766.4	3910.0	4579.6	6084.8	7702.4	7828.7	7624.5
32.5°	5112.4	5074.4	4842.5	4515.6	4186.8	4261.2	4778.5	6366.8	8442.9	8671.3	8422.1
35°	6192.0	6181.6	5939.4	5453.3	4878.9	4761.2	5102.1	6737.0	9250.8	9614.2	9318.3
37.5°	7195.5	7190.3	7051.9	6479.2	5780.3	5458.5	5621.1	7221.4	10115.9	10641.8	10292.4
40°	8112.4	8128.0	7989.6	7477.5	6773.3	6352.9	6327.0	7820.0	11077.8	11761.2	11346.0
42.5°	8904.8	8922.1	8782.0	8403.1	7754.3	7342.5	7193.8	8553.6	12017.3	12963.6	12472.3
45°	9442.9	9550.1	9529.4	9226.6	8761.2	8333.9	8235.3	9474.0	13088.2	14238.7	13662.6
47.5°	9595.1	9693.7	9849.5	9891.0	9607.2	9186.8	9304.5	10583.0	14171.2	15515.5	14859.8
50°	9219.7	9311.4	9634.9	10065.7	10262.9	10133.2	10344.3	11771.6	15280.2	16788.9	16034.6
52.5°	8479.2	8572.6	8980.9	9662.6	10467.1	10875.4	11387.5	12942.9	16354.6	17994.8	17147.0
55°	7408.3	7506.9	8031.1	8802.7	10077.8	11181.6	12257.8	14112.4	17339.1	19079.5	18150.5
57.5°	5951.5	6024.2	6569.2	7648.8	9098.6	10877.1	12899.6	15389.2	18266.4	20145.3	19145.3
60°	3878.9	3942.9	4576.1	5780.3	7475.8	9859.8	13027.6	16813.1	19498.2	21531.1	20486.1
62.5°	2579.6	2622.8	2998.3	3882.3	5264.7	7906.6	12278.5	17949.8	21304.4	23942.8	22785.4
65°	1769.9	1813.1	2188.6	2804.5	3401.4	5230.1	10124.5	17799.3	22941.1	25858.1	24489.6
67.5°	1263.0	1299.3	1617.6	2199.0	2461.9	3038.1	6863.3	15875.4	22705.8	25930.7	24581.2
70°	904.8	925.6	1188.6	1712.8	1956.7	1825.3	3816.6	12141.8	19880.6	23944.6	22709.3
72.5°	633.2	640.1	825.3	1304.5	1576.1	1332.2	1816.6	8095.1	15036.3	18794.1	17605.5
75°	429.1	437.7	555.4	956.7	1264.7	1017.3	961.9	4340.8	8827.0	10403.1	9325.2
77.5°	263.0	266.4	358.1	654.0	946.4	775.1	619.4	1839.1	3415.2	3352.9	2858.1
80°	148.8	148.8	228.4	406.6	645.3	500.0	434.3	782.0	1081.3	949.8	837.4
82.5°	83.0	84.8	166.1	252.6	427.3	295.8	238.8	361.6	467.1	413.5	359.9
85°	34.6	38.1	102.1	119.4	204.2	147.1	96.9	152.2	173.0	154.0	112.5
87.5°	3.5	5.2	31.1	22.5	24.2	29.4	13.8	29.4	24.2	24.2	17.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0	3981.0
2.5°	4006.9	3981.0	3915.2	3839.1	3738.7	3690.3	3624.6	3579.6	3541.5	3545.0	3510.4
5°	4084.8	4019.0	3872.0	3688.6	3460.2	3297.6	3124.6	3005.2	2908.3	2887.5	2840.8
7.5°	4192.0	4088.2	3830.4	3500.0	3114.2	2821.8	2560.5	2392.7	2273.4	2235.3	2197.2
10°	4330.4	4179.9	3776.8	3263.0	2707.6	2335.6	2055.4	1923.9	1842.6	1814.9	1794.1
12.5°	4491.3	4285.5	3705.9	2974.0	2288.9	1930.8	1752.6	1686.8	1660.9	1652.2	1647.1
15°	4693.8	4416.9	3598.6	2631.5	1934.3	1683.4	1607.3	1598.6	1602.1	1598.6	1596.9
17.5°	4934.2	4560.5	3423.9	2278.5	1695.5	1557.1	1529.4	1536.3	1545.0	1543.2	1539.8
20°	5197.2	4702.4	3200.7	1965.4	1532.9	1467.1	1451.6	1458.5	1465.4	1461.9	1460.2
22.5°	5496.5	4854.7	2953.3	1721.4	1423.9	1384.1	1366.8	1368.5	1368.5	1361.6	1358.1
25°	5854.7	5022.5	2693.8	1548.4	1340.8	1309.7	1288.9	1282.0	1271.6	1250.9	1247.4
27.5°	6282.0	5200.7	2444.6	1427.3	1275.1	1245.7	1221.4	1204.1	1178.2	1143.6	1140.1
30°	6763.0	5416.9	2233.6	1351.2	1223.2	1193.8	1166.1	1140.1	1102.1	1058.8	1055.4
32.5°	7328.7	5648.8	2079.6	1301.0	1176.5	1145.3	1112.5	1081.3	1039.8	996.5	998.3
35°	8003.4	5929.0	1989.6	1266.4	1140.1	1098.6	1062.3	1027.7	996.5	958.5	955.0
37.5°	8735.3	6226.6	1961.9	1249.1	1115.9	1051.9	1010.4	986.2	982.7	960.2	958.5
40°	9536.3	6579.6	1982.7	1238.8	1090.0	1006.9	961.9	956.7	965.4	925.6	927.3
42.5°	10384.1	6998.3	2017.3	1226.6	1053.6	961.9	918.7	918.7	911.8	856.4	856.4
45°	11301.0	7480.9	2051.9	1197.2	1010.4	917.0	884.1	872.0	842.6	788.9	787.2
47.5°	12224.9	7972.3	2077.8	1143.6	958.5	878.9	849.5	821.8	778.5	730.1	728.4
50°	13102.0	8413.5	2050.2	1064.0	899.7	842.6	811.4	773.4	726.6	693.8	688.6
52.5°	13885.8	8795.8	1932.5	970.6	837.4	804.5	776.8	737.0	699.0	664.4	660.9
55°	14567.4	9105.5	1724.9	882.4	782.0	771.6	743.9	693.8	641.9	612.5	609.0
57.5°	15221.4	9340.8	1465.4	809.7	731.8	735.3	693.8	648.8	600.3	569.2	565.7
60°	16091.7	9655.7	1202.4	742.2	678.2	688.6	643.6	610.7	550.2	510.4	505.2
62.5°	17482.7	10145.3	955.0	659.2	615.9	619.4	600.3	560.6	487.9	441.2	437.7
65°	18586.5	9965.4	752.6	569.2	545.0	550.2	550.2	506.9	429.1	375.4	370.2
67.5°	18461.9	8532.8	600.3	481.0	477.5	481.0	493.1	456.7	380.6	337.4	330.4
70°	17006.9	6787.2	481.0	399.7	415.2	406.6	441.2	417.0	342.6	299.3	294.1
72.5°	13877.1	4889.3	366.8	330.4	318.3	332.2	397.9	375.4	285.5	237.0	231.8
75°	8109.0	2609.0	273.4	261.2	230.1	276.8	352.9	320.1	218.0	174.7	169.5
77.5°	2640.1	910.0	200.7	192.0	171.3	223.2	301.0	269.9	178.2	138.4	133.2
80°	707.6	275.1	136.7	126.3	110.7	166.1	238.8	214.5	128.0	90.0	88.2
82.5°	283.7	115.9	79.6	70.9	60.6	114.2	188.6	173.0	95.2	57.1	57.1
85°	91.7	38.1	29.4	22.5	27.7	70.9	112.5	117.6	67.5	29.4	22.5
87.5°	12.1	5.2	5.2	6.9	5.2	12.1	34.6	32.9	19.0	3.5	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)