

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: P965095

Luminaire Tested: **NAV-SB3D-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26497.3 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

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

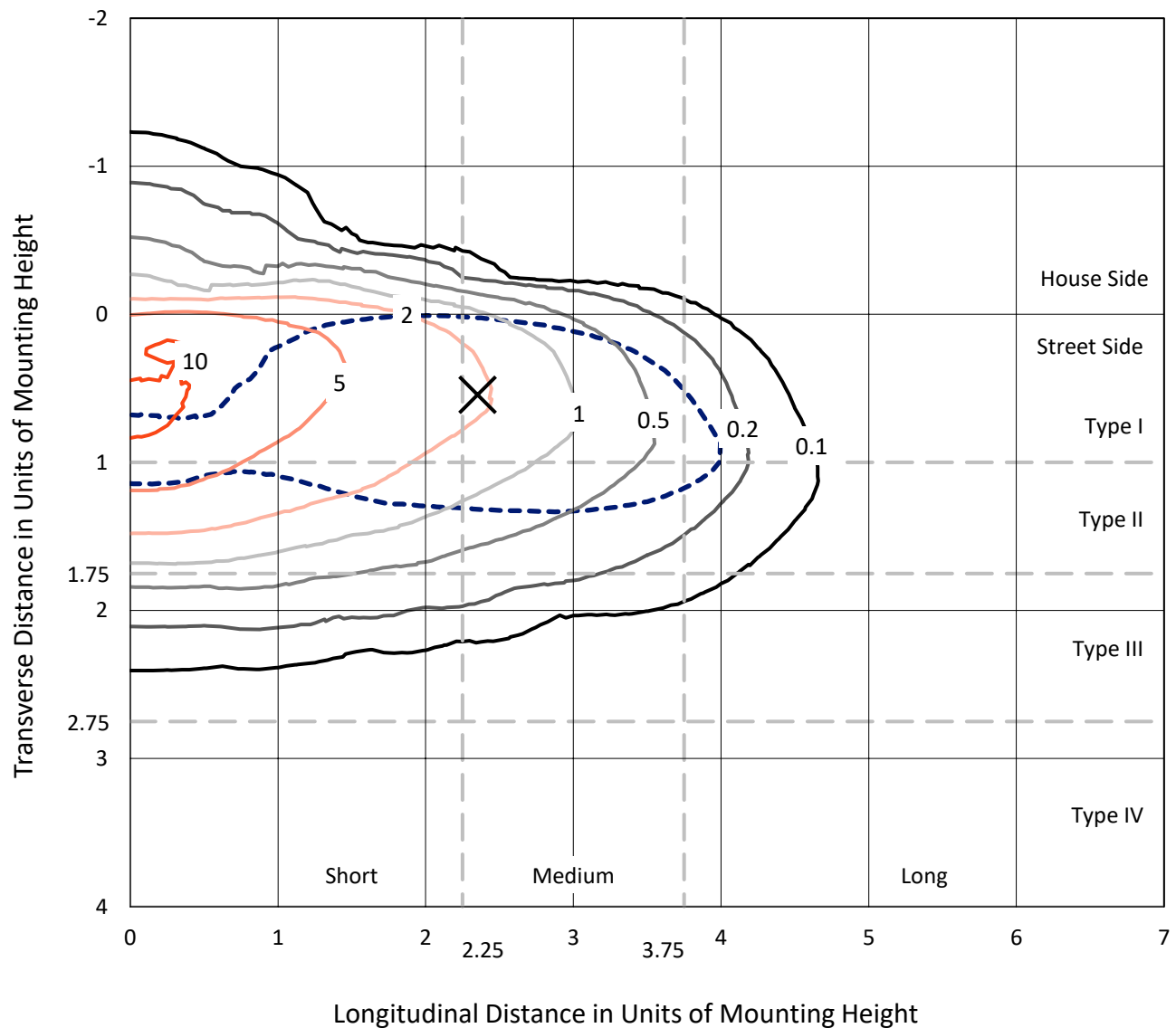


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Iso-Footcandle Lines of Horizontal Illumination

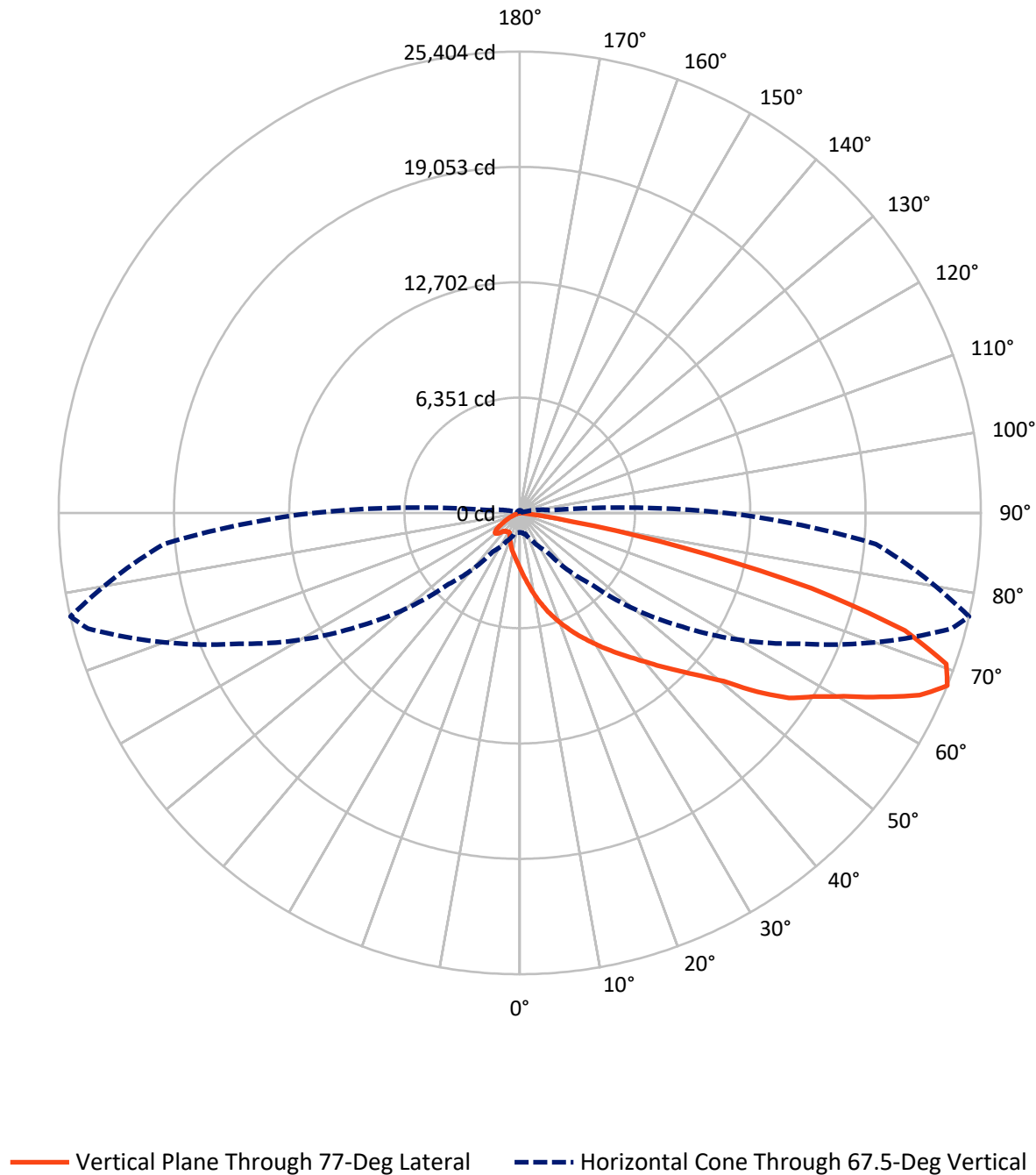
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.4 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	1949.4	0.0	1949.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	24547.9	0.0	24547.9
	% Fixture	92.6	0.0	92.6
Total	Lumens	26497.3	0.0	26497.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.9	1.2
10°-20°	1092.1	4.1
20°-30°	2107.5	8.0
30°-40°	3658.7	13.8
40°-50°	5312.3	20.0
50°-60°	6100.5	23.0
60°-70°	5296.3	20.0
70°-80°	2494.6	9.4
80°-90°	123.4	0.5
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°	26497.3	100.0
0°-180°	26497.3	100.0

Coefficient of Utilization



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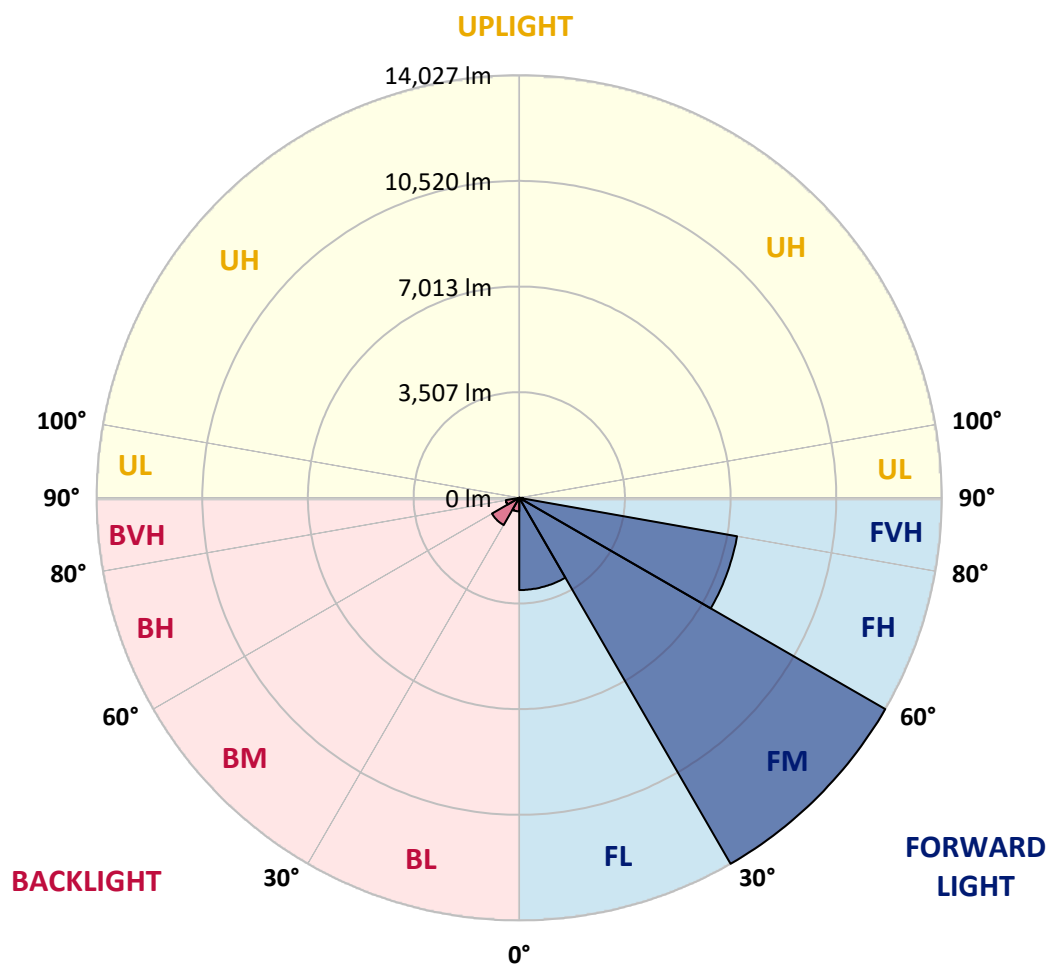
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3060.1	11.5			
FM	(30°-60°)	14026.9	52.9			
FH	(60°-80°)	7339.7	27.7			G3/7500
FVH	(80°-90°)	121.1	0.5			G2/225
BL	(0°-30°)	451.3	1.7	B1/500		
BM	(30°-60°)	1044.5	3.9	B2/2500		
BH	(60°-80°)	451.3	1.7	B1/500		G1/500
BVH	(80°-90°)	2.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5
2.5°	4230.4	4256.7	4218.8	4146.4	4037.9	3967.1	3794.3	3631.4	3450.5	3392.9	3211.8
5°	5156.7	5179.7	5137.0	5058.0	4913.2	4775.0	4547.9	4207.3	3853.6	3740.0	3419.2
7.5°	5842.8	5856.0	5839.5	5767.2	5629.0	5472.7	5219.2	4816.1	4291.3	4166.2	3674.2
10°	6336.4	6379.3	6374.3	6346.4	6254.2	6127.6	5857.7	5398.6	4781.5	4620.3	3962.1
12.5°	6663.9	6711.6	6739.6	6802.1	6797.2	6716.5	6479.6	5994.2	5270.2	5081.0	4286.2
15°	6759.4	6810.3	6917.3	7062.1	7190.5	7231.6	7065.4	6578.3	5808.3	5566.5	4618.6
17.5°	6705.0	6784.1	6912.4	7141.1	7422.4	7608.4	7590.2	7142.7	6297.0	6020.5	4944.5
20°	6825.2	6900.8	7001.3	7193.8	7521.1	7858.5	7993.4	7682.4	6782.4	6492.8	5286.7
22.5°	7489.9	7476.8	7486.6	7517.9	7713.6	8047.7	8325.8	8172.7	7262.8	6966.6	5648.7
25°	8543.0	8483.7	8383.4	8213.8	8164.5	8325.8	8615.3	8607.1	7769.6	7452.1	6018.9
27.5°	9750.7	9740.8	9505.5	9097.5	8867.1	8804.5	8942.8	9030.0	8271.4	7932.5	6390.8
30°	10907.4	10933.8	10616.2	10162.1	9739.1	9494.1	9369.0	9431.5	8781.6	8450.8	6774.1
32.5°	11914.4	11942.4	11596.8	11065.4	10542.1	10246.0	9982.7	9828.0	9337.6	8977.4	7195.4
35°	12765.0	12793.0	12396.6	11809.1	11251.3	10983.1	10685.3	10262.4	9897.1	9561.5	7664.3
37.5°	13525.3	13517.1	12985.5	12393.3	11845.3	11633.0	11476.7	10797.1	10473.0	10148.9	8184.3
40°	13974.4	14009.0	13554.9	12901.7	12370.2	12215.5	12205.6	11460.3	11137.8	10823.5	8753.6
42.5°	14106.0	14166.9	13837.9	13301.5	12819.4	12651.6	12909.9	12177.7	11911.1	11605.0	9396.9
45°	13869.2	13928.4	13778.7	13406.8	13125.4	13016.9	13515.3	12921.4	12737.2	12434.4	10122.6
47.5°	13178.1	13252.1	13288.3	13209.4	13206.1	13316.3	14058.4	13704.7	13717.8	13408.4	10963.4
50°	11840.4	11965.4	12297.7	12577.5	13010.2	13553.3	14586.6	14553.7	14823.4	14556.9	12059.2
52.5°	9408.5	9586.1	10731.3	11496.5	12468.9	13508.8	15167.3	15916.0	16763.5	16373.5	13604.2
55°	7560.7	7560.7	8491.9	9923.4	11412.6	13215.9	15420.8	16801.3	18084.7	17992.5	14691.8
57.5°	6163.7	6237.7	6831.7	8097.1	9884.0	12518.3	15577.1	17357.5	19149.3	19081.8	15754.8
60°	3804.2	3963.8	5085.9	6334.8	8144.8	11276.0	15478.3	17920.2	20441.0	20495.2	17034.9
62.5°	2142.4	2201.6	2701.8	4557.8	6333.2	9605.9	14723.1	18234.4	22093.0	22323.3	18354.6
65°	1479.2	1508.8	1701.4	2836.7	4390.0	7647.8	13247.2	18038.7	23748.2	24213.9	19473.5
67.5°	1074.4	1089.3	1209.4	1732.7	2604.7	5545.0	10933.8	17051.4	24625.2	25403.5	19687.3
70°	825.9	835.9	923.1	1138.7	1538.4	3422.5	7940.8	15088.4	23990.0	24919.7	18591.4
72.5°	671.4	681.2	748.7	842.4	1020.2	2023.9	4812.8	12253.4	21186.3	22190.0	15827.2
75°	566.0	579.2	640.1	700.9	799.7	1299.9	2257.5	8533.1	15932.5	16590.6	11006.1
77.5°	314.3	289.6	520.0	580.9	674.7	822.7	1056.4	5021.8	8923.0	9105.7	4883.6
80°	195.8	202.3	413.0	467.3	518.3	414.6	483.8	1933.4	3093.3	2938.7	946.1
82.5°	11.5	26.3	317.5	337.3	355.4	177.7	182.7	656.5	745.4	684.5	167.8
85°	0.0	0.0	144.8	116.8	123.4	51.0	52.7	153.0	100.3	108.5	32.9
87.5°	0.0	0.0	0.0	3.3	0.0	4.9	9.8	13.1	4.9	6.6	11.5
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°	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5
2.5°	3096.6	2981.5	2747.8	2519.1	2333.2	2160.4	2037.0	1920.2	1861.0	1857.7	1854.3
5°	3190.4	2948.6	2481.3	2068.2	1735.9	1469.3	1296.6	1173.2	1110.7	1089.3	1086.0
7.5°	3322.1	2958.5	2247.6	1673.4	1281.8	1053.1	954.4	914.8	901.7	886.8	883.6
10°	3488.3	2981.5	2038.6	1347.6	1010.2	895.1	855.6	839.2	829.3	819.4	816.1
12.5°	3674.2	3002.8	1831.4	1118.9	888.5	829.3	801.3	781.6	768.4	756.9	753.6
15°	3855.2	3016.1	1615.8	959.3	825.9	778.3	748.7	727.2	709.2	696.0	694.3
17.5°	4034.5	3034.1	1413.4	863.9	775.0	727.2	697.6	671.4	656.5	641.8	640.1
20°	4233.7	3030.8	1222.5	796.4	724.0	676.3	645.0	620.3	605.5	589.1	587.4
22.5°	4418.0	3014.4	1054.7	738.8	671.4	625.2	590.7	566.0	551.2	538.0	536.4
25°	4630.2	3001.2	914.8	686.1	622.0	575.8	538.0	515.1	498.6	487.1	485.4
27.5°	4834.2	2981.5	812.8	638.4	574.2	529.8	493.6	467.3	452.5	444.2	444.2
30°	5034.9	2976.5	775.0	592.3	531.5	487.1	450.8	426.2	414.6	411.3	409.7
32.5°	5276.8	2989.7	791.4	575.8	492.0	447.5	413.0	394.9	383.3	383.3	383.3
35°	5535.2	2986.4	816.1	590.7	465.7	408.1	381.7	370.2	358.7	358.7	358.7
37.5°	5859.3	2991.4	835.9	615.4	455.8	375.2	360.4	345.5	339.0	339.0	339.0
40°	6343.0	3154.2	825.9	636.7	452.5	352.1	322.5	317.5	312.6	312.6	312.6
42.5°	6935.4	3508.1	839.2	638.4	450.8	335.7	296.1	306.1	294.5	292.8	291.2
45°	7583.7	3894.7	923.1	603.8	449.2	327.5	283.0	294.5	276.4	276.4	276.4
47.5°	8227.1	4278.0	1008.6	554.5	444.2	325.7	271.5	264.9	259.9	261.6	261.6
50°	9113.9	4590.7	1041.5	487.1	432.8	322.5	250.1	251.7	248.5	251.7	251.7
52.5°	10079.7	4656.5	1002.0	411.3	399.9	312.6	235.3	241.9	240.3	243.5	243.5
55°	10682.0	4585.7	827.7	342.2	348.8	273.2	220.5	233.6	233.6	233.6	233.6
57.5°	11304.0	4284.6	587.4	278.1	289.6	223.8	207.4	225.4	223.8	222.1	222.1
60°	11751.5	3797.6	386.6	228.7	230.3	184.3	192.5	212.3	210.6	202.3	202.3
62.5°	12085.6	3259.6	248.5	194.1	176.1	166.2	176.1	192.5	185.9	167.8	164.5
65°	12047.6	2514.2	190.9	166.2	144.8	144.8	153.0	167.8	148.1	118.5	115.2
67.5°	11345.1	1701.4	158.0	139.8	121.8	120.1	126.7	139.8	126.7	100.3	97.1
70°	10089.7	1112.3	126.7	108.5	97.1	88.9	102.0	120.1	106.9	80.7	77.3
72.5°	8189.2	677.9	95.4	79.0	70.7	57.6	80.7	98.7	85.6	59.2	56.0
75°	5298.2	345.5	65.8	51.0	37.8	34.5	59.2	74.0	59.2	36.2	31.3
77.5°	2027.1	144.8	36.2	23.1	19.8	16.5	32.9	44.4	24.7	8.2	6.6
80°	390.0	60.9	18.1	11.5	9.8	6.6	4.9	3.3	0.0	0.0	0.0
82.5°	67.4	19.8	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	23.1	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)