

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: P885506

Luminaire Tested: **NAV-SB6D-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885506
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-SB6D-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 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: 36646 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

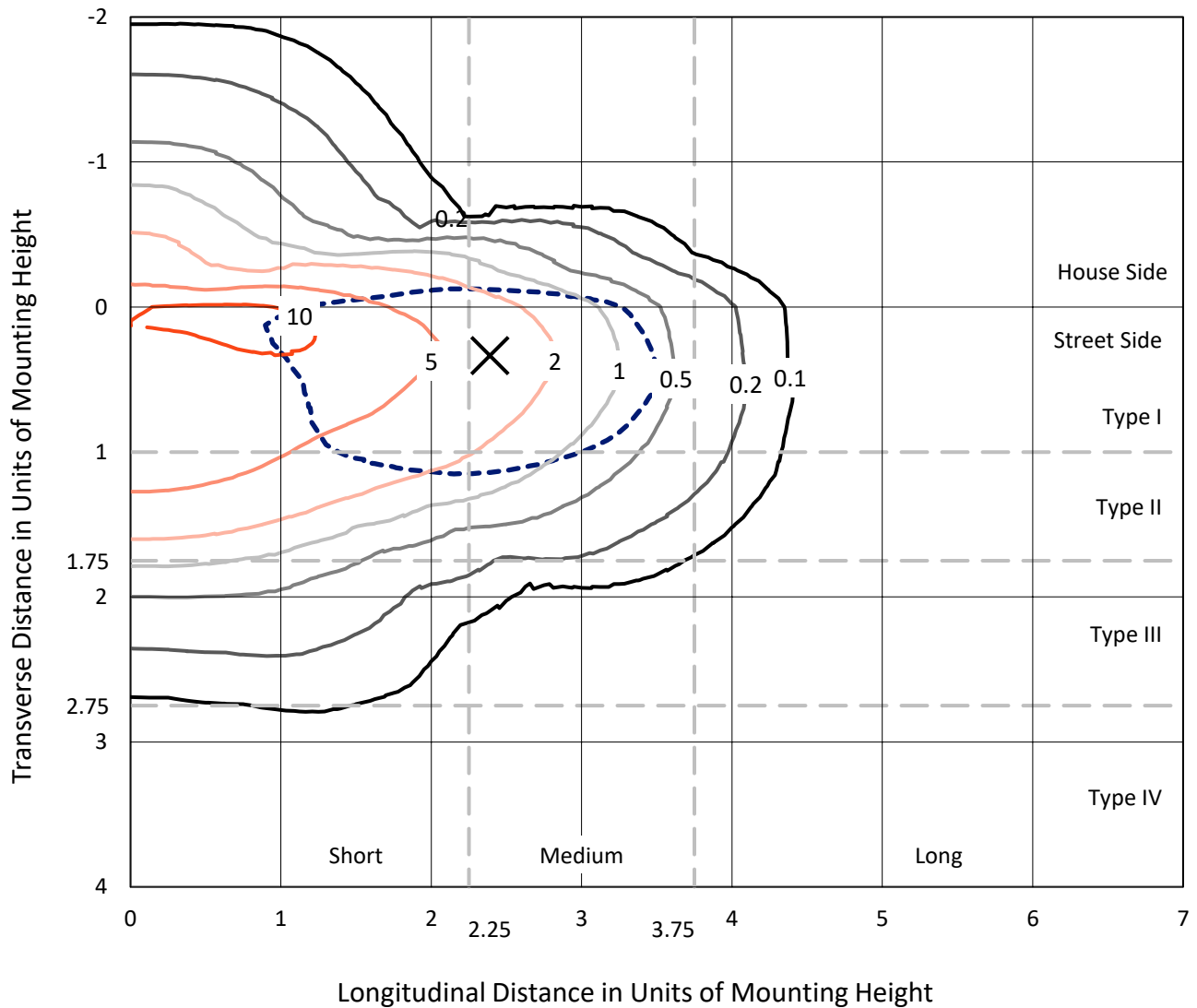
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

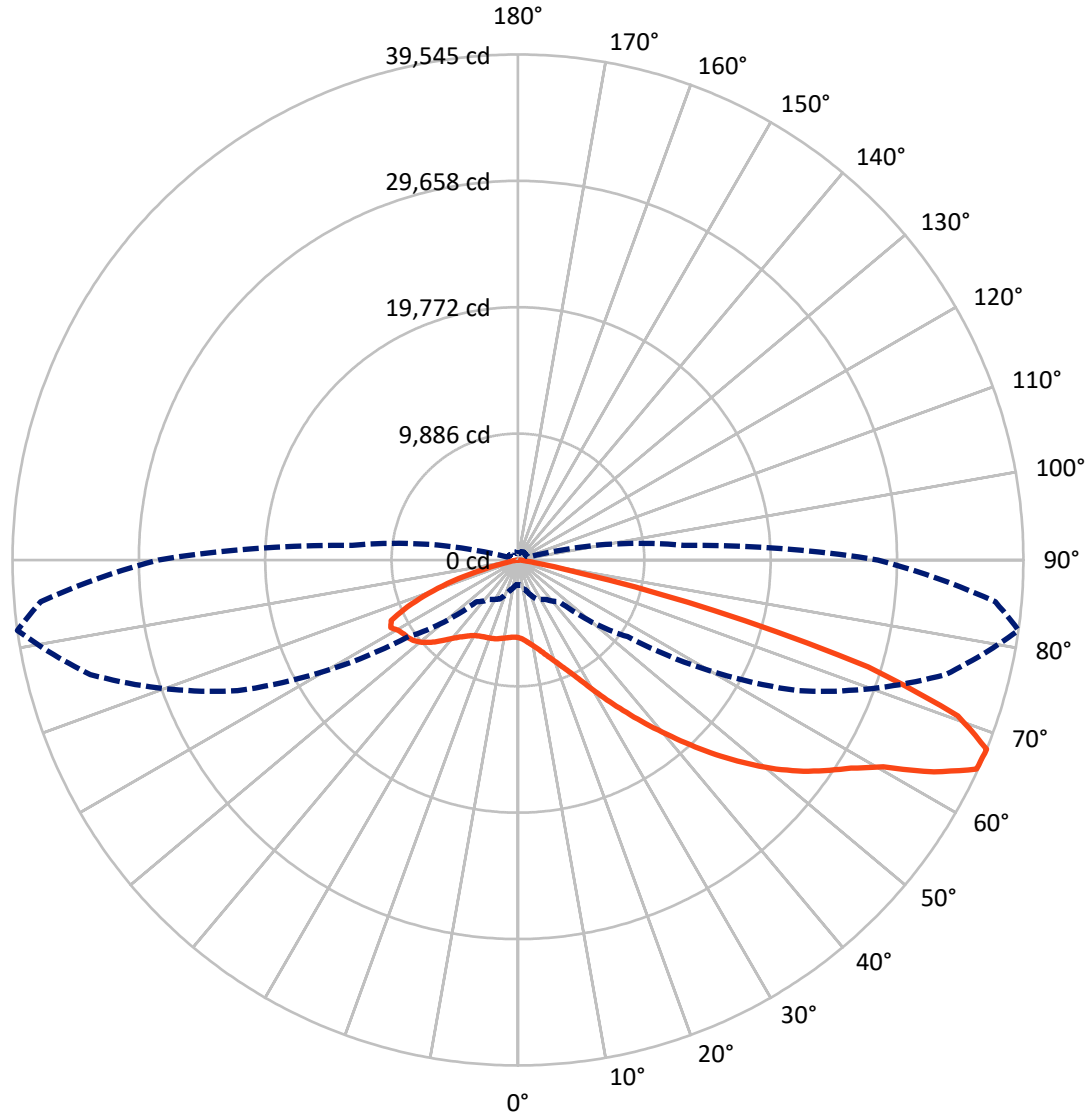
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6638.1	0.0	6638.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	30007.9	0.0	30007.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	36646.0	0.0	36646.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	540.9	1.5
10°-20°	1405.5	3.8
20°-30°	2251.2	6.1
30°-40°	3980.8	10.9
40°-50°	6974.8	19.0
50°-60°	9302.4	25.4
60°-70°	8660.1	23.6
70°-80°	3323.7	9.1
80°-90°	206.4	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°	36646.0	100.0
0°-180°	36646.0	100.0

Coefficient of Utilization



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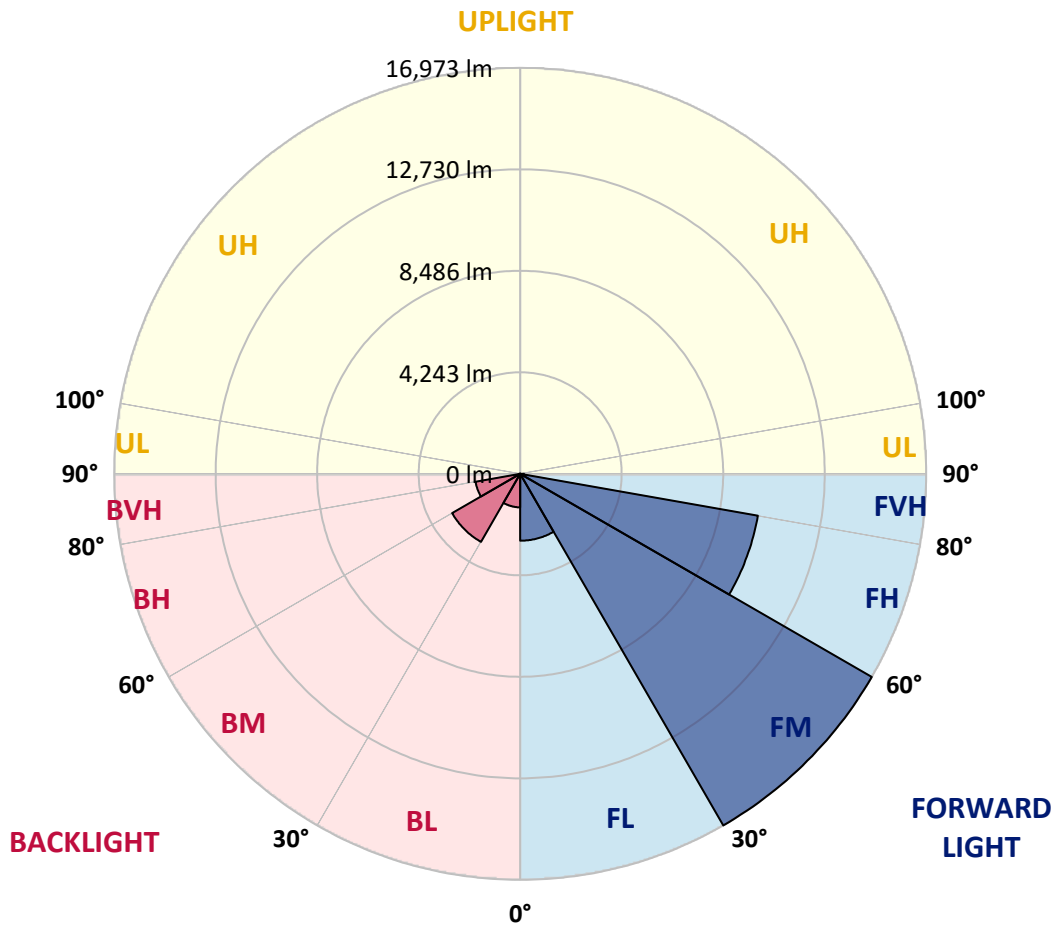
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2795.7	7.6			
FM (30°-60°)	16972.9	46.3			
FH (60°-80°)	10089.2	27.5			G4/12000
FVH (80°-90°)	150.1	0.4			G2/225
BL (0°-30°)	1401.9	3.8	B3/2500		
BM (30°-60°)	3285.2	9.0	B3/5000		
BH (60°-80°)	1894.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	56.4	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0
2.5°	6416.6	6453.6	6432.5	6421.9	6403.4	6377.1	6356.0	6290.0	6221.4	6176.5	6160.7
5°	6545.9	6582.9	6580.2	6590.8	6604.0	6611.9	6606.6	6532.7	6435.1	6358.6	6313.7
7.5°	6435.1	6477.3	6511.6	6564.4	6656.7	6754.4	6801.8	6786.0	6685.8	6580.2	6524.8
10°	6121.1	6166.0	6247.8	6371.8	6567.0	6778.1	6954.9	7036.7	6973.3	6857.3	6780.7
12.5°	5546.0	5590.8	5751.8	6020.9	6348.0	6714.8	7052.5	7271.5	7287.3	7171.2	7081.5
15°	4899.5	4944.4	5115.9	5453.6	5952.3	6540.6	7105.3	7519.5	7659.3	7559.1	7450.9
17.5°	4498.5	4538.1	4667.4	4939.1	5458.9	6192.4	7086.8	7783.3	8102.6	8023.4	7894.1
20°	4377.1	4411.4	4472.1	4662.1	5094.8	5830.9	6965.4	8031.3	8580.1	8535.3	8390.2
22.5°	4506.4	4538.1	4556.5	4641.0	4912.7	5593.4	6812.4	8284.6	9134.2	9139.5	8962.7
25°	4804.6	4836.2	4815.1	4867.9	4986.6	5519.6	6754.4	8582.8	9830.7	9888.8	9688.3
27.5°	5295.3	5297.9	5247.8	5245.2	5263.6	5630.4	6815.0	8902.0	10709.3	10817.5	10569.5
30°	6279.4	6239.9	6047.3	5838.8	5743.8	5962.8	6983.9	9279.3	11746.2	11938.8	11627.5
32.5°	7796.5	7738.5	7384.9	6886.3	6385.0	6498.4	7287.3	9709.4	12875.5	13223.8	12843.8
35°	9442.9	9427.1	9057.7	8316.3	7440.3	7260.9	7780.7	10274.0	14107.6	14661.7	14210.5
37.5°	10973.2	10965.3	10754.2	9880.9	8815.0	8324.2	8572.2	11012.8	15426.8	16228.9	15696.0
40°	12371.5	12395.3	12184.2	11403.2	10329.4	9688.3	9648.7	11925.7	16893.8	17936.0	17302.8
42.5°	13579.9	13606.3	13392.6	12814.8	11825.4	11197.5	10970.5	13044.3	18326.5	19769.7	19020.4
45°	14400.5	14564.1	14532.4	14070.7	13361.0	12709.3	12558.9	14448.0	19959.6	21714.2	20835.6
47.5°	14632.7	14783.1	15020.5	15083.8	14651.1	14010.0	14189.4	16139.2	21611.3	23661.3	22661.4
50°	14060.1	14200.0	14693.4	15350.3	15651.1	15453.2	15775.1	17951.8	23302.5	25603.2	24452.9
52.5°	12930.9	13073.4	13696.0	14735.6	15962.4	16585.1	17366.1	19738.0	24941.0	27442.2	26149.4
55°	11297.7	11448.1	12247.5	13424.3	15368.8	17052.1	18693.2	21521.6	26442.2	29096.5	27679.7
57.5°	9076.2	9187.0	10018.1	11664.5	13875.4	16587.7	19672.1	23468.7	27856.4	30721.8	29196.7
60°	5915.3	6013.0	6978.6	8815.0	11400.6	15036.3	19867.3	25640.2	29735.0	32835.1	31241.5
62.5°	3933.9	3999.8	4572.4	5920.6	8028.7	12057.6	18724.9	27373.6	32489.5	36513.1	34748.0
65°	2699.1	2765.1	3337.6	4276.9	5187.1	7975.9	15440.0	27144.1	34985.4	39433.8	37346.8
67.5°	1926.0	1981.5	2466.9	3353.4	3754.5	4633.1	10466.6	24210.1	34626.6	39544.6	37486.7
70°	1379.9	1411.6	1812.6	2612.0	2984.1	2783.5	5820.4	18516.4	30318.1	36515.7	34631.9
72.5°	965.7	976.2	1258.5	1989.4	2403.6	2031.6	2770.3	12345.2	22930.5	28661.1	26848.6
75°	654.3	667.5	846.9	1459.0	1928.7	1551.4	1467.0	6619.8	13461.2	15864.8	14221.1
77.5°	401.0	406.3	546.2	997.3	1443.2	1182.0	944.6	2804.6	5208.2	5113.3	4358.7
80°	226.9	226.9	348.3	620.0	984.1	762.5	662.2	1192.6	1649.0	1448.5	1277.0
82.5°	126.6	129.3	253.3	385.2	651.7	451.2	364.1	551.4	712.4	630.6	548.8
85°	52.8	58.0	155.7	182.1	311.3	224.3	147.8	232.2	263.8	234.8	171.5
87.5°	5.3	7.9	47.5	34.3	36.9	44.9	21.1	44.9	36.9	36.9	26.4
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°	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0	6071.0
2.5°	6110.6	6071.0	5970.7	5854.7	5701.6	5627.7	5527.5	5458.9	5400.8	5406.1	5353.4
5°	6229.3	6129.0	5904.8	5625.1	5276.8	5028.8	4765.0	4582.9	4435.2	4403.5	4332.3
7.5°	6392.9	6234.6	5841.5	5337.5	4749.2	4303.3	3904.9	3648.9	3466.9	3408.8	3350.8
10°	6604.0	6374.4	5759.7	4976.1	4129.1	3561.9	3134.4	2933.9	2809.9	2767.7	2736.0
12.5°	6849.3	6535.4	5651.5	4535.4	3490.6	2944.5	2672.7	2572.5	2532.9	2519.7	2511.8
15°	7158.0	6735.9	5487.9	4013.0	2949.8	2567.2	2451.1	2437.9	2443.2	2437.9	2435.3
17.5°	7524.8	6954.9	5221.4	3474.8	2585.7	2374.6	2332.4	2342.9	2356.1	2353.5	2348.2
20°	7925.8	7171.2	4881.1	2997.2	2337.6	2237.4	2213.6	2224.2	2234.7	2229.5	2226.8
22.5°	8382.3	7403.4	4503.8	2625.2	2171.4	2110.7	2084.4	2087.0	2087.0	2076.4	2071.2
25°	8928.4	7659.3	4108.0	2361.4	2044.8	1997.3	1965.6	1955.1	1939.2	1907.6	1902.3
27.5°	9580.1	7931.1	3728.1	2176.7	1944.5	1899.7	1862.7	1836.3	1796.8	1744.0	1738.7
30°	10313.6	8260.9	3406.2	2060.6	1865.4	1820.5	1778.3	1738.7	1680.7	1614.7	1609.4
32.5°	11176.3	8614.4	3171.4	1984.1	1794.1	1746.6	1696.5	1649.0	1585.7	1519.7	1522.4
35°	12205.3	9041.9	3034.2	1931.3	1738.7	1675.4	1620.0	1567.2	1519.7	1461.7	1456.4
37.5°	13321.4	9495.7	2992.0	1904.9	1701.8	1604.2	1540.8	1503.9	1498.6	1464.3	1461.7
40°	14543.0	10033.9	3023.6	1889.1	1662.2	1535.6	1467.0	1459.0	1472.2	1411.6	1414.2
42.5°	15835.8	10672.4	3076.4	1870.6	1606.8	1467.0	1401.0	1401.0	1390.4	1306.0	1306.0
45°	17234.2	11408.5	3129.2	1825.8	1540.8	1398.4	1348.2	1329.8	1284.9	1203.1	1200.5
47.5°	18643.1	12157.8	3168.7	1744.0	1461.7	1340.3	1295.5	1253.2	1187.3	1113.4	1110.8
50°	19980.7	12830.6	3126.5	1622.6	1372.0	1284.9	1237.4	1179.4	1108.1	1058.0	1050.1
52.5°	21176.0	13413.7	2947.1	1480.2	1277.0	1226.9	1184.7	1124.0	1065.9	1013.2	1007.9
55°	22215.5	13886.0	2630.5	1345.6	1192.6	1176.7	1134.5	1058.0	978.9	934.0	928.7
57.5°	23212.8	14244.8	2234.7	1234.8	1116.1	1121.3	1058.0	989.4	915.5	868.0	862.8
60°	24539.9	14725.0	1833.7	1131.9	1034.3	1050.1	981.5	931.4	839.0	778.3	770.4
62.5°	26661.2	15471.7	1456.4	1005.2	939.3	944.6	915.5	854.8	744.0	672.8	667.5
65°	28344.5	15197.3	1147.7	868.0	831.1	839.0	839.0	773.1	654.3	572.5	564.6
67.5°	28154.6	13012.7	915.5	733.5	728.2	733.5	751.9	696.5	580.5	514.5	503.9
70°	25935.7	10350.5	733.5	609.5	633.2	620.0	672.8	635.9	522.4	456.4	448.5
72.5°	21162.8	7456.2	559.3	503.9	485.5	506.6	606.8	572.5	435.3	361.5	353.5
75°	12366.3	3978.7	416.9	398.4	350.9	422.1	538.2	488.1	332.4	266.5	258.6
77.5°	4026.2	1387.8	306.1	292.9	261.2	340.4	459.1	411.6	271.8	211.1	203.2
80°	1079.1	419.5	208.4	192.6	168.9	253.3	364.1	327.2	195.2	137.2	134.6
82.5°	432.7	176.8	121.4	108.2	92.3	174.1	287.6	263.8	145.1	87.1	87.1
85°	139.8	58.0	44.9	34.3	42.2	108.2	171.5	179.4	102.9	44.9	34.3
87.5°	18.5	7.9	7.9	10.6	7.9	18.5	52.8	50.1	29.0	5.3	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)