

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: P959460

Luminaire Tested: **NAV-SB1A-830-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959460
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4242.5 lumens
Efficiency: N/A
Efficacy: 137.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

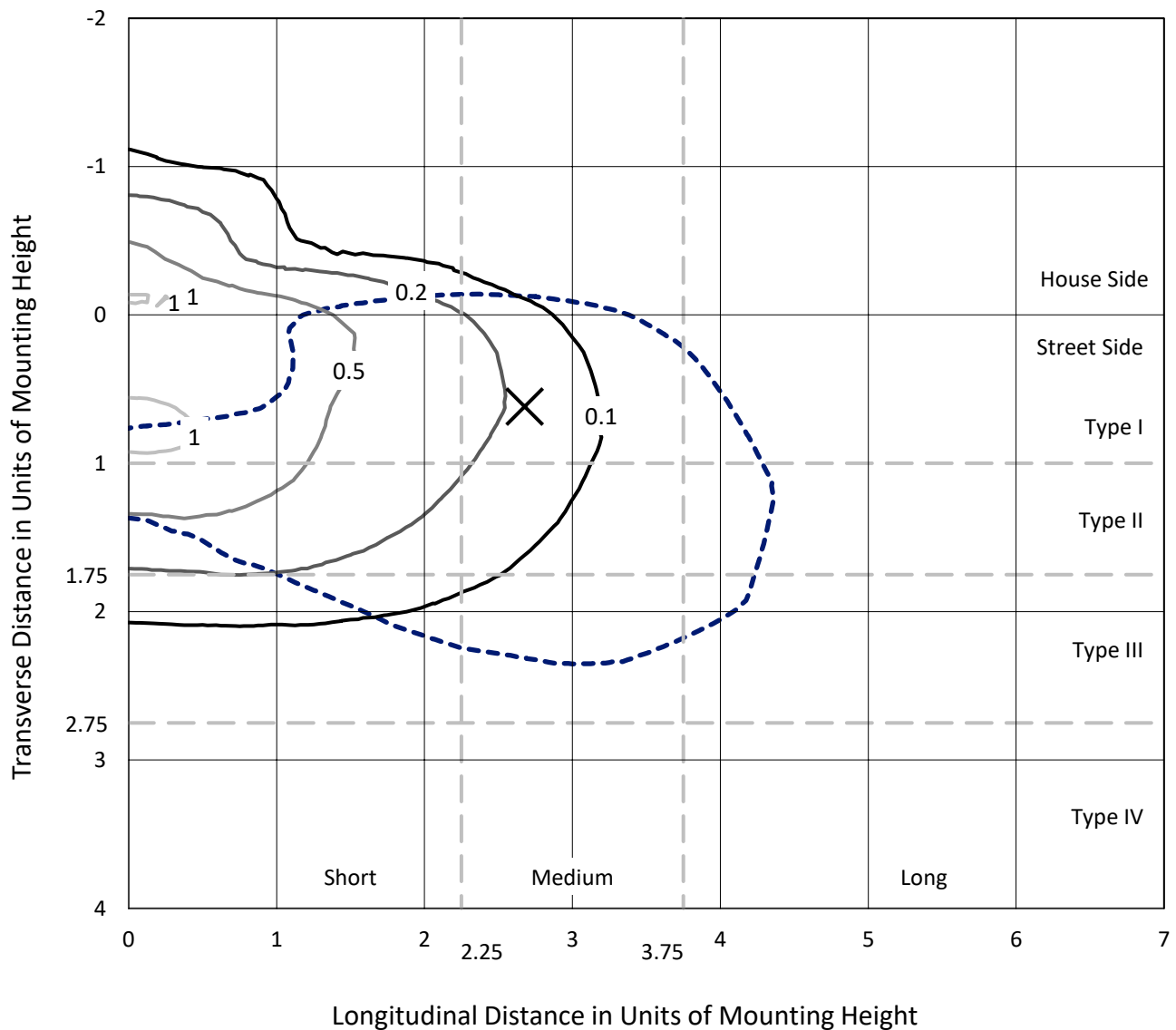
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

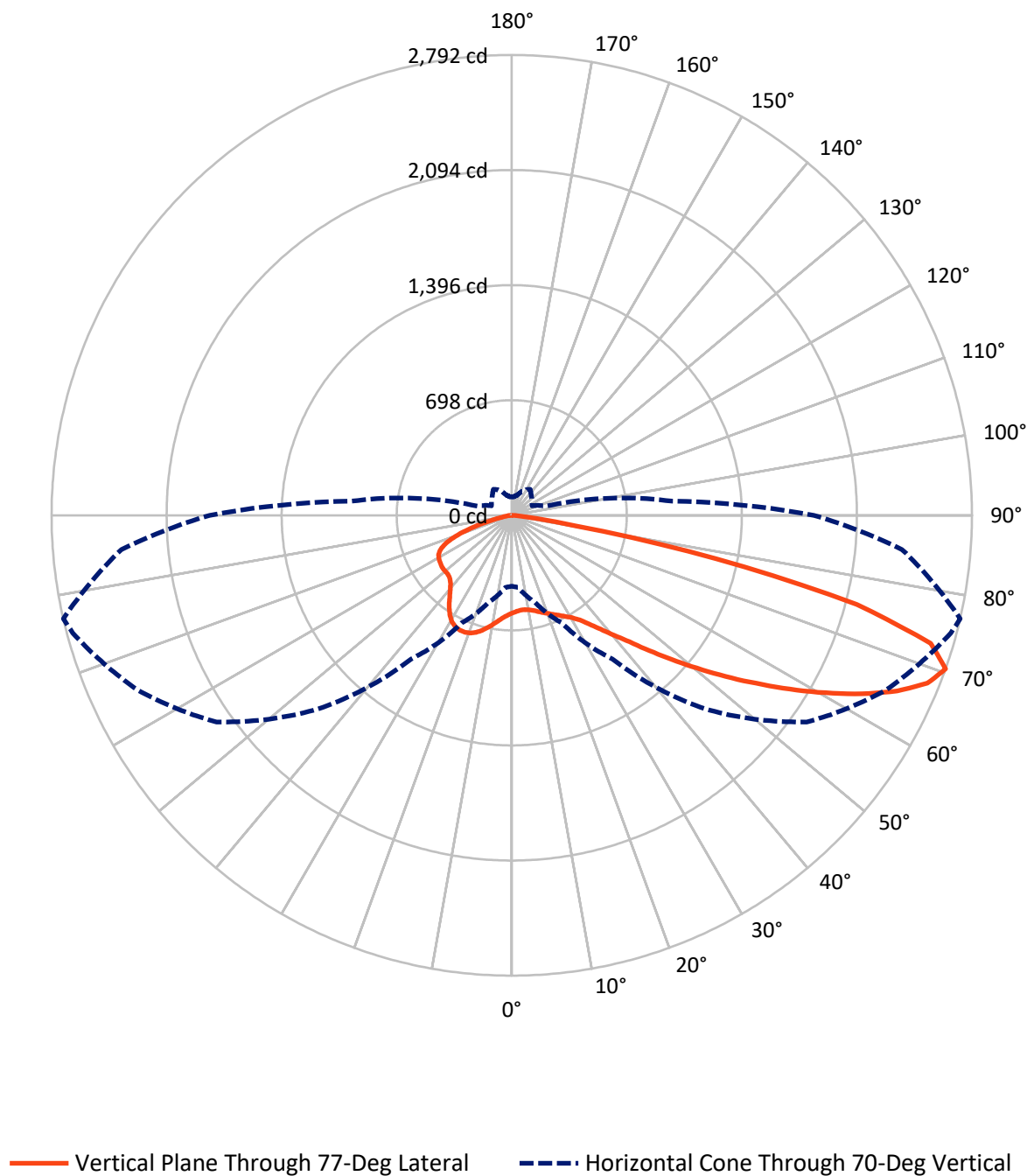
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	929.0	0.0	929.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	3313.4	0.0	3313.4
	% Fixture	78.1	0.0	78.1
Total	Lumens	4242.5	0.0	4242.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	1.3
10°-20°	162.9	3.8
20°-30°	278.6	6.6
30°-40°	448.0	10.6
40°-50°	699.5	16.5
50°-60°	934.4	22.0
60°-70°	995.9	23.5
70°-80°	613.0	14.5
80°-90°	53.7	1.3
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°	4242.5	100.0
0°-180°	4242.5	100.0

Coefficient of Utilization



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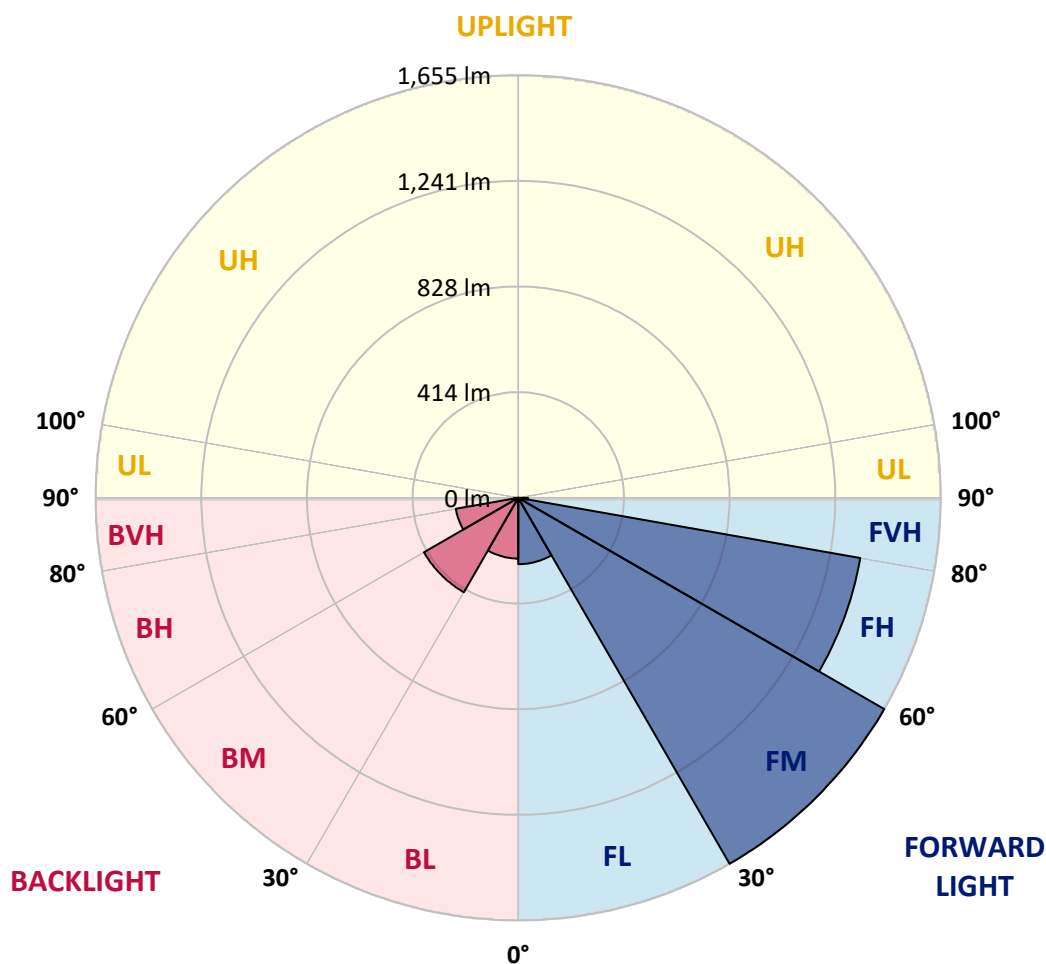
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	259.9	6.1			
FM	(30°-60°)	1655.3	39.0			
FH	(60°-80°)	1360.6	32.1			G1/1800
FVH	(80°-90°)	37.6	0.9			G1/100
BL	(0°-30°)	238.0	5.6	B1/500		
BM	(30°-60°)	426.5	10.1	B1/1000		
BH	(60°-80°)	248.3	5.9	B1/500		G1/500
BVH	(80°-90°)	16.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8
2.5°	545.6	545.4	548.2	549.1	554.3	558.0	564.9	572.4	581.9	582.9	588.9
5°	514.0	514.0	517.3	520.8	527.6	534.9	545.6	558.4	574.9	577.5	592.0
7.5°	487.4	489.1	491.9	498.7	506.5	517.1	533.4	551.7	573.4	577.5	601.0
10°	465.9	467.8	471.3	476.7	488.4	503.2	524.5	548.0	577.1	583.6	614.1
12.5°	459.1	461.0	463.0	467.2	478.1	495.4	520.8	549.7	586.0	592.6	631.8
15°	474.8	477.1	475.6	474.6	480.2	496.0	522.5	556.1	597.1	606.4	653.7
17.5°	510.9	511.7	508.2	498.0	497.1	505.6	530.8	564.7	611.0	621.2	676.0
20°	569.1	567.5	560.4	540.2	528.6	526.8	544.9	577.7	625.4	636.2	699.9
22.5°	648.1	646.4	632.0	600.1	574.5	557.5	565.4	594.7	641.4	653.5	723.1
25°	746.8	744.4	723.3	679.9	640.1	598.2	593.2	617.0	661.1	672.5	747.4
27.5°	861.9	860.0	837.2	779.8	722.4	653.7	627.7	643.4	681.8	694.6	774.8
30°	985.7	991.5	951.0	889.3	816.7	726.3	674.2	675.8	708.6	720.1	808.0
32.5°	1131.4	1141.1	1092.4	1014.2	915.2	805.2	732.9	720.9	747.4	757.0	850.0
35°	1275.6	1286.7	1246.3	1159.8	1045.8	898.2	794.2	772.8	799.2	809.5	905.6
37.5°	1400.4	1415.1	1394.3	1319.1	1185.5	1010.3	874.1	833.9	862.8	875.9	980.3
40°	1498.8	1521.4	1519.9	1472.9	1350.1	1146.4	975.6	909.3	941.9	956.0	1070.9
42.5°	1578.7	1598.3	1615.2	1612.8	1522.0	1300.8	1094.9	1007.3	1032.1	1048.4	1172.9
45°	1634.0	1654.8	1691.2	1730.6	1687.4	1466.2	1231.5	1123.5	1146.2	1170.7	1294.4
47.5°	1683.3	1706.9	1754.3	1816.6	1827.8	1632.2	1381.2	1258.9	1279.5	1304.9	1416.2
50°	1687.6	1708.1	1781.4	1869.9	1927.5	1791.7	1542.0	1410.8	1430.1	1457.2	1546.8
52.5°	1582.6	1614.8	1743.0	1868.4	1973.3	1925.1	1701.7	1568.8	1590.5	1623.1	1681.9
55°	1228.5	1275.6	1630.3	1810.2	1957.0	2011.4	1853.6	1736.7	1764.5	1798.7	1817.9
57.5°	1058.1	1078.8	1294.1	1704.1	1882.7	2033.7	1981.8	1906.4	1951.2	1988.5	1961.7
60°	951.0	968.2	1095.5	1539.2	1784.9	1998.3	2080.9	2064.6	2141.9	2186.4	2108.9
62.5°	836.3	852.6	968.4	1285.2	1659.8	1939.4	2143.5	2210.6	2337.5	2386.1	2247.5
65°	722.4	736.4	847.4	1079.8	1500.7	1880.6	2175.8	2336.8	2518.4	2568.9	2362.6
67.5°	595.5	607.1	712.1	911.0	1307.4	1799.9	2191.9	2436.1	2676.0	2719.2	2419.6
70°	429.8	438.7	547.1	720.5	1064.7	1661.3	2185.4	2506.5	2757.7	2792.2	2376.6
72.5°	203.2	211.2	338.6	467.8	752.0	1391.4	2053.5	2450.7	2674.7	2657.5	2113.2
75°	108.4	115.4	194.4	256.6	397.2	953.9	1680.4	2111.1	2246.0	2162.5	1561.8
77.5°	73.4	78.8	120.3	154.1	181.4	452.8	1080.0	1461.6	1406.2	1268.4	782.2
80°	58.2	63.9	98.6	104.2	87.7	163.6	446.3	676.6	486.1	388.7	222.5
82.5°	44.8	51.0	83.0	75.6	47.8	67.1	130.0	214.0	124.5	94.7	53.9
85°	27.4	34.1	65.2	48.3	27.0	30.6	44.1	59.6	38.0	31.7	19.4
87.5°	13.9	19.6	33.0	17.6	12.2	7.2	11.7	11.7	10.0	8.7	5.0
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°	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8	591.8
2.5°	594.0	598.4	605.8	612.7	618.2	623.4	628.6	631.4	632.3	635.7	637.8
5°	601.0	609.1	623.4	636.8	645.3	650.6	654.3	656.4	656.8	657.9	659.7
7.5°	613.8	626.6	646.6	660.1	666.4	665.9	664.4	659.0	656.8	654.9	655.3
10°	631.8	648.8	673.3	682.6	678.8	668.3	654.9	639.0	631.6	624.4	622.3
12.5°	654.3	675.8	699.9	699.5	680.1	653.3	622.1	597.8	582.3	571.2	568.6
15°	681.4	706.1	724.6	709.8	667.5	619.4	573.6	541.9	528.0	515.8	514.6
17.5°	709.4	735.9	744.4	706.6	635.7	569.3	517.3	492.3	478.7	472.1	474.1
20°	736.8	763.1	756.1	687.9	587.5	512.3	466.1	452.3	449.6	451.1	450.4
22.5°	765.7	789.1	758.5	651.8	526.0	454.1	428.7	429.2	435.4	440.0	441.1
25°	795.2	811.1	752.2	599.7	460.0	411.3	405.0	411.9	424.4	433.3	435.6
27.5°	823.7	830.7	738.5	535.2	403.2	380.7	381.7	396.1	414.8	427.1	430.2
30°	855.9	848.1	712.3	462.6	364.0	354.3	363.5	380.3	398.9	410.0	412.6
32.5°	892.2	863.0	670.6	395.4	336.1	333.3	348.3	359.2	367.5	370.6	372.4
35°	937.4	884.1	617.0	348.3	311.2	317.9	332.2	326.8	323.5	321.7	323.5
37.5°	996.0	912.6	554.5	317.6	290.9	306.8	312.6	295.7	282.9	276.5	278.1
40°	1066.6	954.3	494.4	294.0	278.1	297.2	287.0	266.6	250.3	241.4	242.0
42.5°	1145.0	997.9	443.7	276.1	270.9	289.5	268.1	243.7	217.5	214.6	217.5
45°	1227.4	1042.9	409.2	262.5	267.4	282.7	257.3	217.9	199.3	210.7	216.9
47.5°	1309.7	1084.2	388.3	252.3	265.7	275.1	247.7	203.6	190.3	207.0	214.8
50°	1401.5	1121.1	378.9	244.9	263.7	272.0	233.4	199.9	181.0	192.1	200.3
52.5°	1492.5	1149.8	372.0	237.5	261.0	269.7	226.4	195.6	169.7	170.4	174.9
55°	1583.3	1168.5	364.4	227.8	254.6	264.4	225.7	190.8	161.2	158.2	160.3
57.5°	1680.2	1179.2	355.1	216.9	243.7	251.1	225.1	187.1	158.6	153.6	154.3
60°	1778.9	1194.8	342.9	203.6	229.2	235.3	223.6	185.7	157.1	148.6	149.2
62.5°	1867.2	1200.3	328.3	191.0	210.5	219.7	220.3	184.7	152.9	138.4	138.4
65°	1925.3	1176.8	302.9	176.6	190.3	203.6	214.0	181.0	145.5	131.0	131.0
67.5°	1922.9	1109.9	263.1	158.2	170.8	185.7	204.9	174.7	136.6	121.9	122.6
70°	1833.4	977.7	212.7	136.6	149.2	166.7	193.1	165.3	126.0	111.9	113.2
72.5°	1572.5	765.3	154.5	111.4	124.3	146.9	177.9	154.1	115.1	103.0	102.3
75°	1123.3	484.3	104.8	85.6	96.7	124.5	159.1	140.8	105.2	103.4	97.6
77.5°	573.8	231.4	69.3	62.5	67.3	98.2	133.7	125.8	106.7	85.4	76.1
80°	186.7	85.4	43.7	42.5	44.8	65.4	103.4	103.2	80.9	58.0	51.2
82.5°	59.6	36.7	28.5	27.4	26.2	41.1	72.2	81.7	54.5	36.7	36.5
85°	23.7	21.9	16.7	15.5	11.1	19.4	37.8	54.3	40.6	26.5	27.2
87.5°	8.7	8.7	4.6	3.3	2.4	6.6	10.2	16.3	23.3	13.7	13.4
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)