

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: P969296

Luminaire Tested: **NAV-SB5D-735-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-735-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44923.7 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 364.9
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

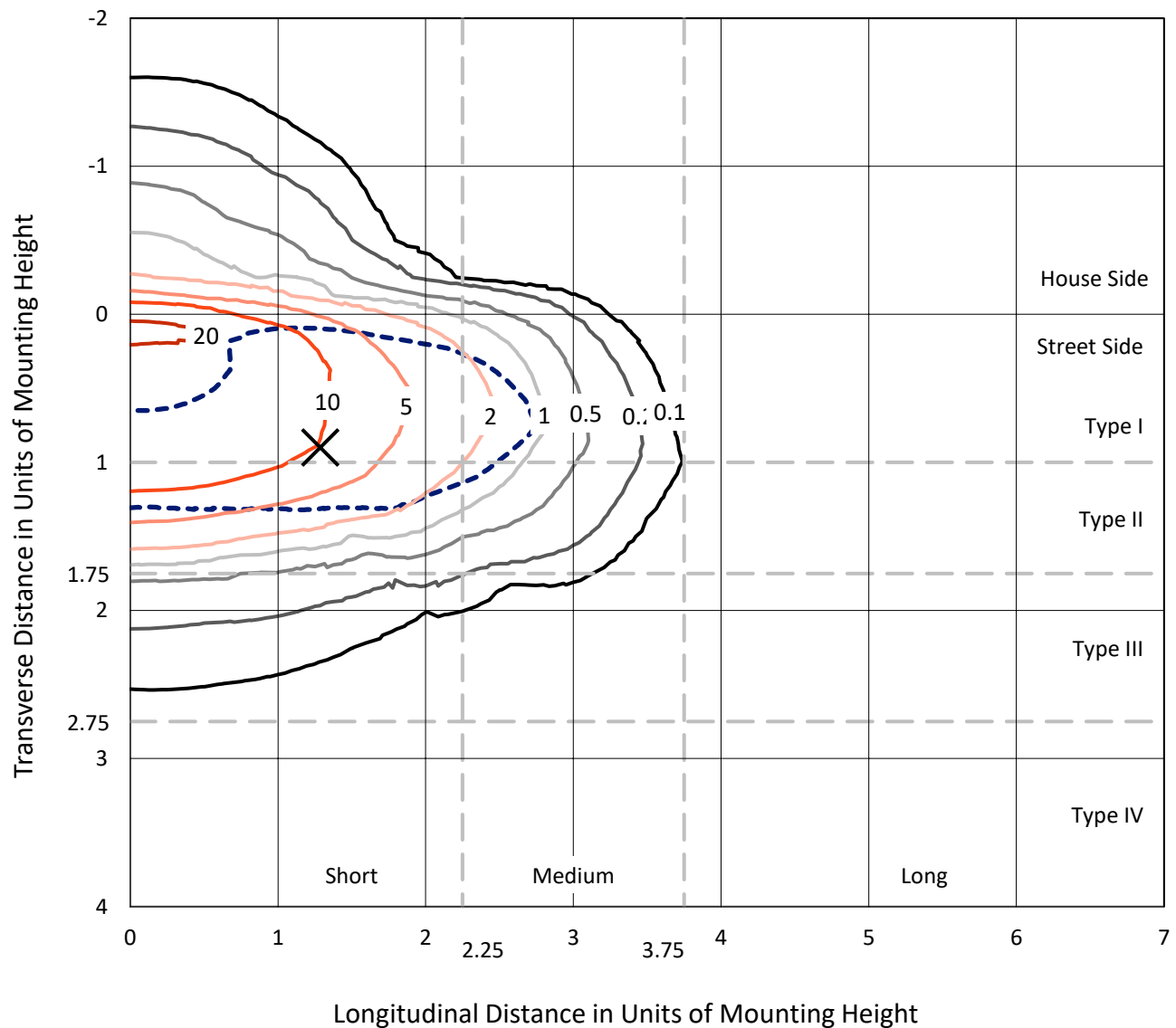


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

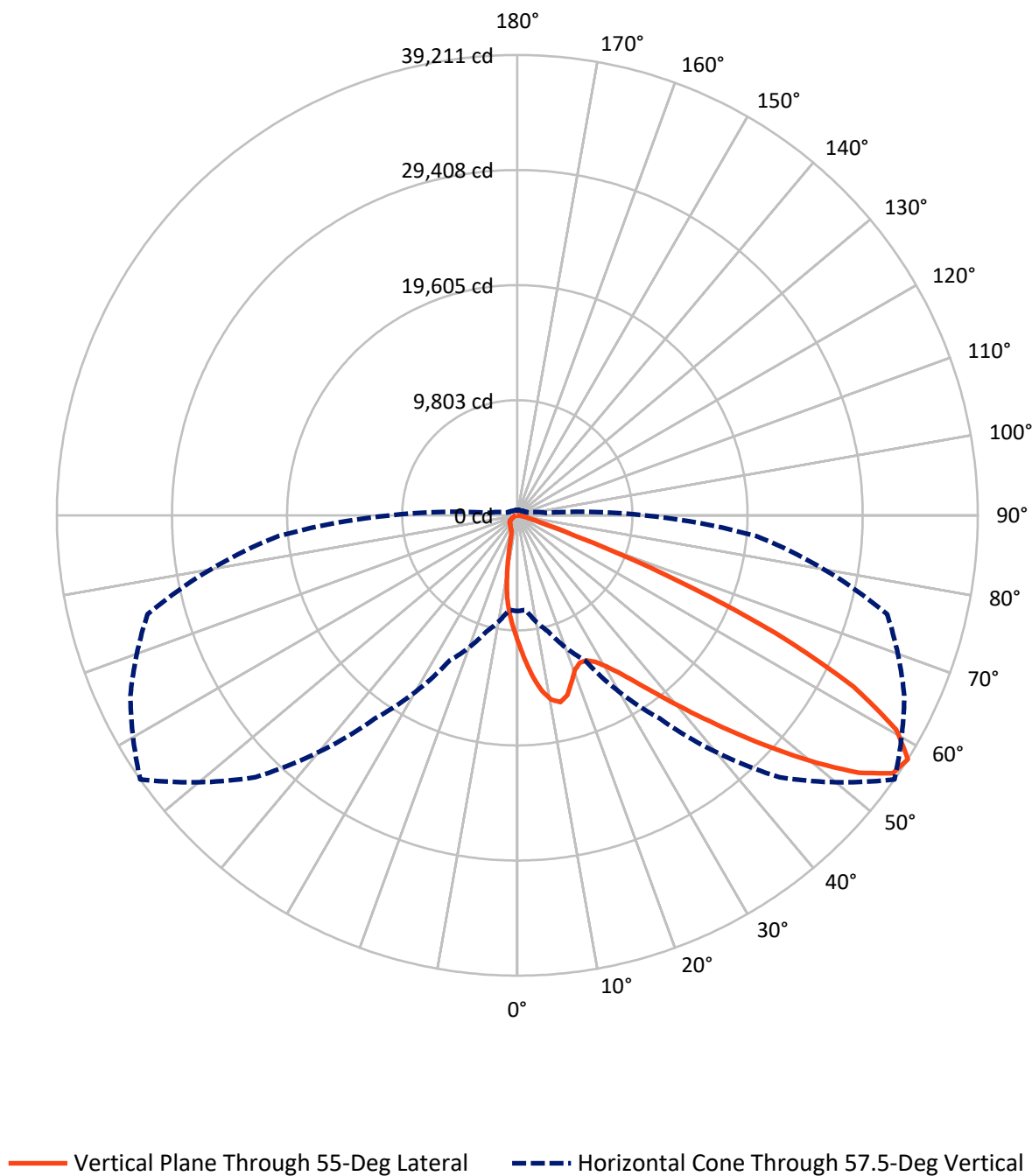


Based on 25 foot mounting height. Maximum calculated value = 24.8 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3508.3	0.0	3508.3
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	41415.4	0.0	41415.4
	% Fixture	92.2	0.0	92.2
Total	Lumens	44923.7	0.0	44923.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1007.2	2.2
10°-20°	2433.0	5.4
20°-30°	3892.8	8.7
30°-40°	6588.8	14.7
40°-50°	10817.4	24.1
50°-60°	11889.1	26.5
60°-70°	6819.6	15.2
70°-80°	1393.4	3.1
80°-90°	82.2	0.2
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°	44923.7	100.0
0°-180°	44923.7	100.0

Coefficient of Utilization



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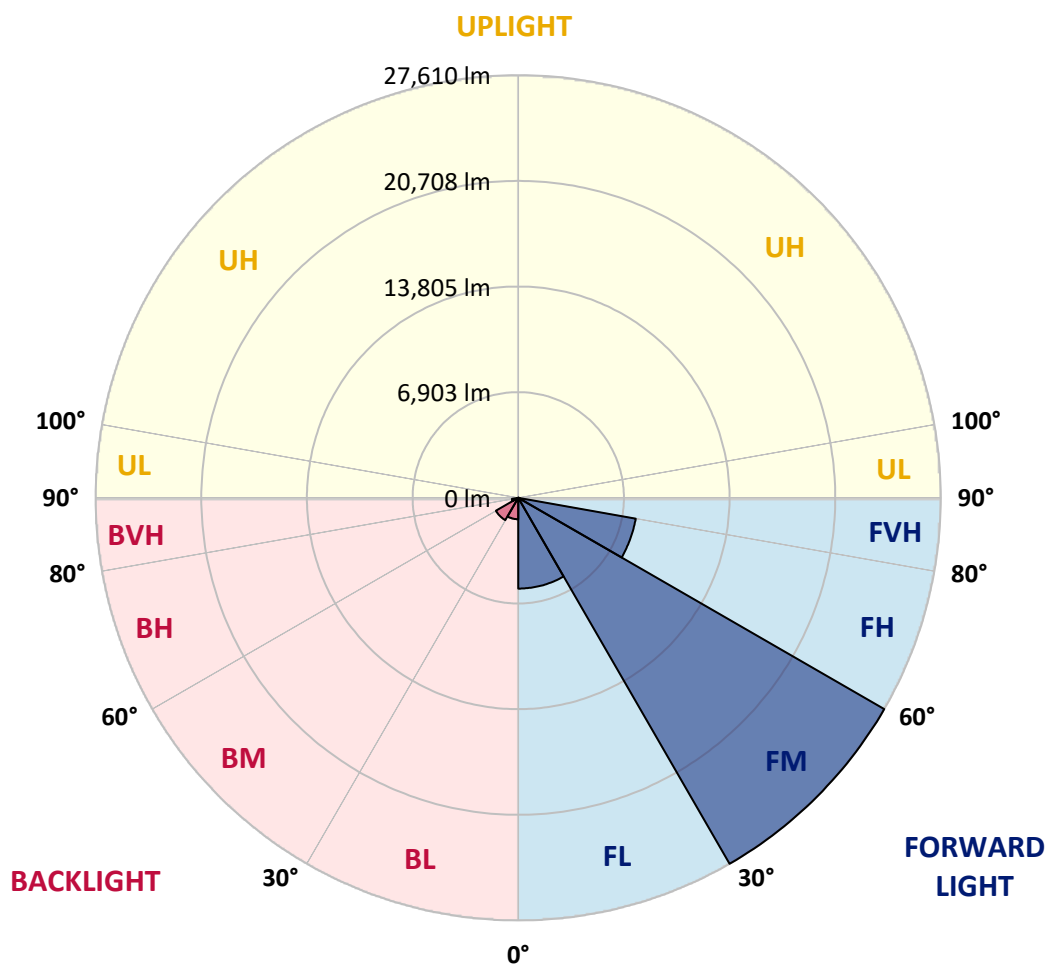
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5932.4	13.2			
FM	(30°-60°)	27610.4	61.5			
FH	(60°-80°)	7795.8	17.4			G4/12000
FVH	(80°-90°)	76.7	0.2			G1/100
BL	(0°-30°)	1400.6	3.1	B3/2500		
BM	(30°-60°)	1684.9	3.8	B2/2500		
BH	(60°-80°)	417.2	0.9	B1/500		G1/500
BVH	(80°-90°)	5.5	0.0			G0/10
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5
2.5°	13432.1	13263.2	13238.3	13205.0	12883.6	12642.7	12293.6	11911.4	11482.0	11044.4	10850.4
5°	15518.0	15385.0	15360.1	15205.1	14839.3	14429.4	13808.9	13025.0	12224.4	11282.6	10878.1
7.5°	15922.5	15897.5	16011.1	16005.6	15955.7	15631.6	15108.1	14174.5	12972.3	11576.2	10950.2
10°	14119.2	14182.8	14520.8	14817.2	15617.7	16083.2	15969.6	15199.5	13742.4	11911.4	11030.5
12.5°	12476.5	12401.7	12642.7	12977.8	13908.6	15293.6	16326.9	16055.4	14623.3	12290.9	11149.6
15°	11446.0	11415.5	11551.2	11706.4	12415.5	13811.7	15911.4	16750.8	15470.9	12739.6	11329.6
17.5°	11116.3	11091.4	11132.9	11171.8	11631.6	12711.9	14922.5	17177.4	16282.5	13252.1	11529.1
20°	11385.1	11351.8	11346.2	11315.8	11507.0	12243.8	14027.7	17207.8	17011.1	13717.5	11700.9
22.5°	12169.0	12130.3	11994.4	11872.6	11889.2	12307.5	13628.8	16903.1	17559.6	14152.4	11808.9
25°	13590.1	13526.3	13243.8	12833.8	12573.5	12750.7	13689.8	16501.4	18083.2	14493.1	11756.2
27.5°	15368.4	15285.3	14922.5	14313.0	13717.5	13501.4	14130.2	16224.4	18518.1	14753.4	11642.7
30°	17110.8	17002.8	16645.5	16171.7	15301.9	14620.5	14925.2	16346.3	19036.1	15025.0	11493.1
32.5°	18991.7	18889.2	18415.6	17828.3	17108.1	16191.2	16013.9	16941.8	19670.4	15404.4	11387.9
35°	21371.2	21210.5	20537.4	19736.9	18972.3	18044.3	17487.5	17969.6	20515.3	15983.4	11446.0
37.5°	24080.4	23864.4	23138.6	22033.3	21036.1	19997.2	19282.6	19382.3	21753.5	16759.1	11626.1
40°	26634.4	26437.7	25767.4	24725.8	23473.7	22213.3	21451.6	21230.0	23462.7	17703.6	11941.9
42.5°	28166.3	27989.0	27706.5	27266.0	26210.6	24925.2	23964.0	23484.8	25484.8	18833.9	12326.9
45°	28252.2	28097.0	28476.6	28988.9	28781.2	27925.3	26753.5	25875.4	27515.3	19894.7	12725.8
47.5°	26878.2	26772.9	27925.3	29714.7	30606.7	30966.8	29886.4	28066.6	29191.2	20656.5	12889.2
50°	23133.0	23094.3	25465.4	28750.7	31302.0	33631.7	33191.2	30105.3	30490.4	21049.9	12734.1
52.5°	20058.2	19917.0	21299.2	25664.9	30290.9	35033.3	36421.1	32105.4	31398.9	21124.7	12371.2
55°	15213.4	15088.7	16822.7	20501.4	27030.5	34534.7	38784.1	34169.0	32049.9	20933.6	11720.3
57.5°	8160.6	8083.2	10274.3	13645.4	21130.3	31543.0	39210.6	36351.8	32598.4	20426.6	10808.9
60°	3177.3	3163.5	3983.4	6620.5	12842.1	25662.1	37058.3	37662.1	32941.9	19803.4	10047.2
62.5°	1922.5	1964.0	2096.9	2972.3	5673.2	15941.8	32097.1	36171.8	33171.8	19232.7	9418.3
65°	1590.0	1592.8	1609.5	2041.6	2717.5	6670.4	24163.5	31268.8	32603.9	18216.1	8526.4
67.5°	1362.8	1387.8	1451.5	1620.5	1916.9	2925.2	13911.4	24221.7	29149.7	15850.4	7135.7
70°	1074.8	1108.0	1188.4	1332.4	1479.2	1831.1	5141.3	16116.4	22268.7	11947.4	5396.1
72.5°	905.8	903.0	944.6	1083.1	1174.5	1288.1	1977.8	9030.5	12941.9	5703.6	2670.3
75°	700.8	728.6	781.2	905.8	961.2	933.6	1072.0	3299.2	4637.1	1728.6	908.6
77.5°	548.5	570.6	617.8	739.6	795.0	662.0	617.8	1180.1	1490.4	620.5	410.0
80°	246.5	265.9	421.1	545.7	648.2	457.0	335.2	603.9	662.0	282.6	207.8
82.5°	44.3	74.8	246.5	288.1	332.4	296.4	174.6	313.0	324.1	113.6	72.1
85°	2.8	5.5	85.9	105.3	132.9	97.0	52.6	124.6	108.0	38.7	27.7
87.5°	0.0	0.0	0.0	2.8	2.8	13.8	16.6	22.1	16.6	13.8	11.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5	10825.5
2.5°	10651.0	10257.7	9875.4	9562.3	9379.5	9069.3	8864.3	8831.0	8745.2	8819.9
5°	10446.0	9742.4	9030.5	8393.4	7869.8	7194.0	6689.8	6476.5	6290.8	6354.6
7.5°	10349.0	9238.2	8130.2	7041.5	5922.4	4842.1	4038.8	3703.6	3448.7	3484.8
10°	10218.8	8714.7	6977.9	5315.8	3817.2	2750.7	2196.7	1991.7	1878.1	1880.9
12.5°	10119.1	8088.7	5639.9	3603.9	2324.1	1756.2	1584.4	1534.6	1501.4	1504.2
15°	10069.3	7351.8	4318.5	2401.7	1662.0	1487.6	1446.0	1423.8	1401.7	1398.9
17.5°	9986.2	6531.9	3160.7	1753.5	1454.3	1393.4	1357.3	1332.4	1304.7	1299.2
20°	9861.5	5601.1	2310.2	1482.0	1362.8	1315.8	1266.0	1232.7	1199.5	1193.9
22.5°	9631.6	4617.7	1775.6	1371.1	1296.4	1243.7	1182.8	1144.0	1110.8	1105.3
25°	9205.0	3695.3	1495.9	1302.0	1238.2	1174.5	1108.0	1055.4	1024.9	1019.4
27.5°	8664.8	2903.0	1357.3	1238.2	1163.5	1105.3	1030.4	980.6	952.9	947.4
30°	8027.7	2235.4	1277.0	1166.2	1074.8	1024.9	958.5	916.9	900.3	900.3
32.5°	7340.7	1786.7	1243.7	1094.2	997.2	941.9	889.2	872.6	867.0	864.3
35°	6695.3	1551.2	1227.1	1036.0	927.9	875.4	853.2	856.0	867.0	867.0
37.5°	6121.9	1476.4	1218.8	994.5	867.0	819.9	833.8	858.7	847.7	847.7
40°	5603.9	1484.8	1213.3	964.0	817.1	789.5	817.1	797.8	770.1	767.3
42.5°	5207.7	1554.0	1202.2	939.1	786.7	767.3	756.2	725.8	723.0	728.6
45°	4919.7	1615.0	1199.5	927.9	753.5	717.5	703.6	673.1	728.6	742.4
47.5°	4579.0	1615.0	1199.5	889.2	698.0	684.2	662.0	628.8	684.2	698.0
50°	4138.5	1512.5	1152.4	844.9	653.7	645.4	606.7	565.1	554.0	562.3
52.5°	3581.8	1326.9	1033.2	783.9	609.5	592.8	545.7	515.3	507.0	507.0
55°	2947.4	1110.8	872.6	695.3	562.3	531.9	498.7	484.7	476.4	470.9
57.5°	2396.1	911.3	700.8	617.8	518.0	479.2	468.1	451.5	437.7	429.4
60°	1966.8	717.5	578.9	548.5	473.7	437.7	434.9	412.8	376.7	371.2
62.5°	1518.0	526.3	487.5	476.4	429.4	398.9	393.4	349.0	293.7	282.6
65°	1072.0	410.0	393.4	418.3	382.2	354.5	340.7	274.2	216.1	207.8
67.5°	753.5	343.5	310.3	365.6	332.4	296.4	288.1	232.7	180.1	174.6
70°	537.4	279.8	254.8	313.0	265.9	260.3	243.7	193.9	146.8	141.2
72.5°	379.5	213.3	196.7	271.4	182.9	224.4	199.5	149.5	110.8	105.3
75°	279.8	152.3	138.5	157.8	132.9	169.0	141.2	99.7	69.3	66.5
77.5°	205.0	97.0	83.1	77.6	77.6	105.3	77.6	41.5	30.4	27.7
80°	144.0	44.3	38.7	33.2	30.4	24.9	11.1	5.5	2.8	2.8
82.5°	85.9	19.4	19.4	13.8	8.3	0.0	0.0	0.0	0.0	0.0
85°	19.4	8.3	8.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	2.8	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

(END OF REPORT)