

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: P971528

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971528
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-SB6D-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 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: 46894.8 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

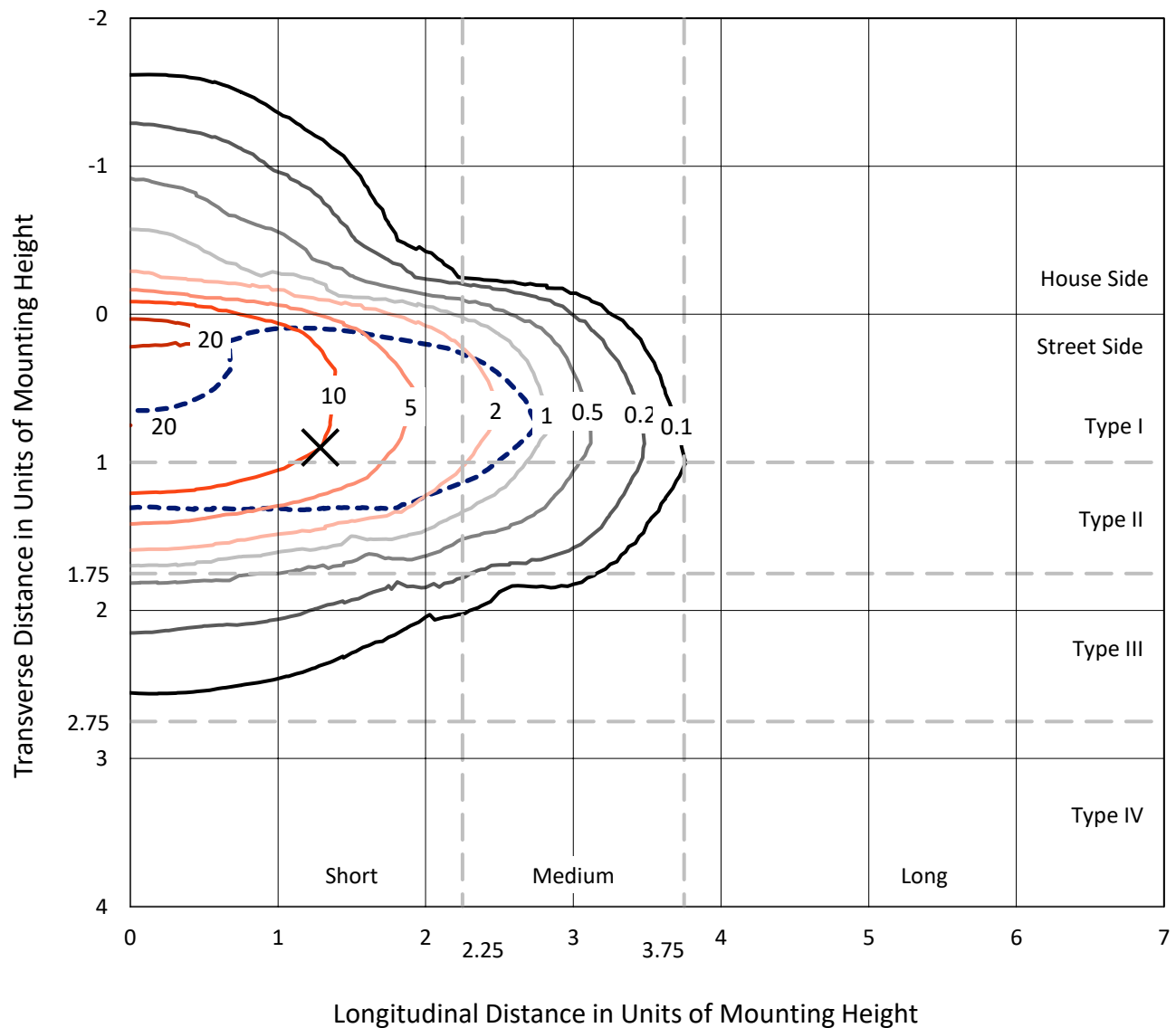
Input Watts (W): 440.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

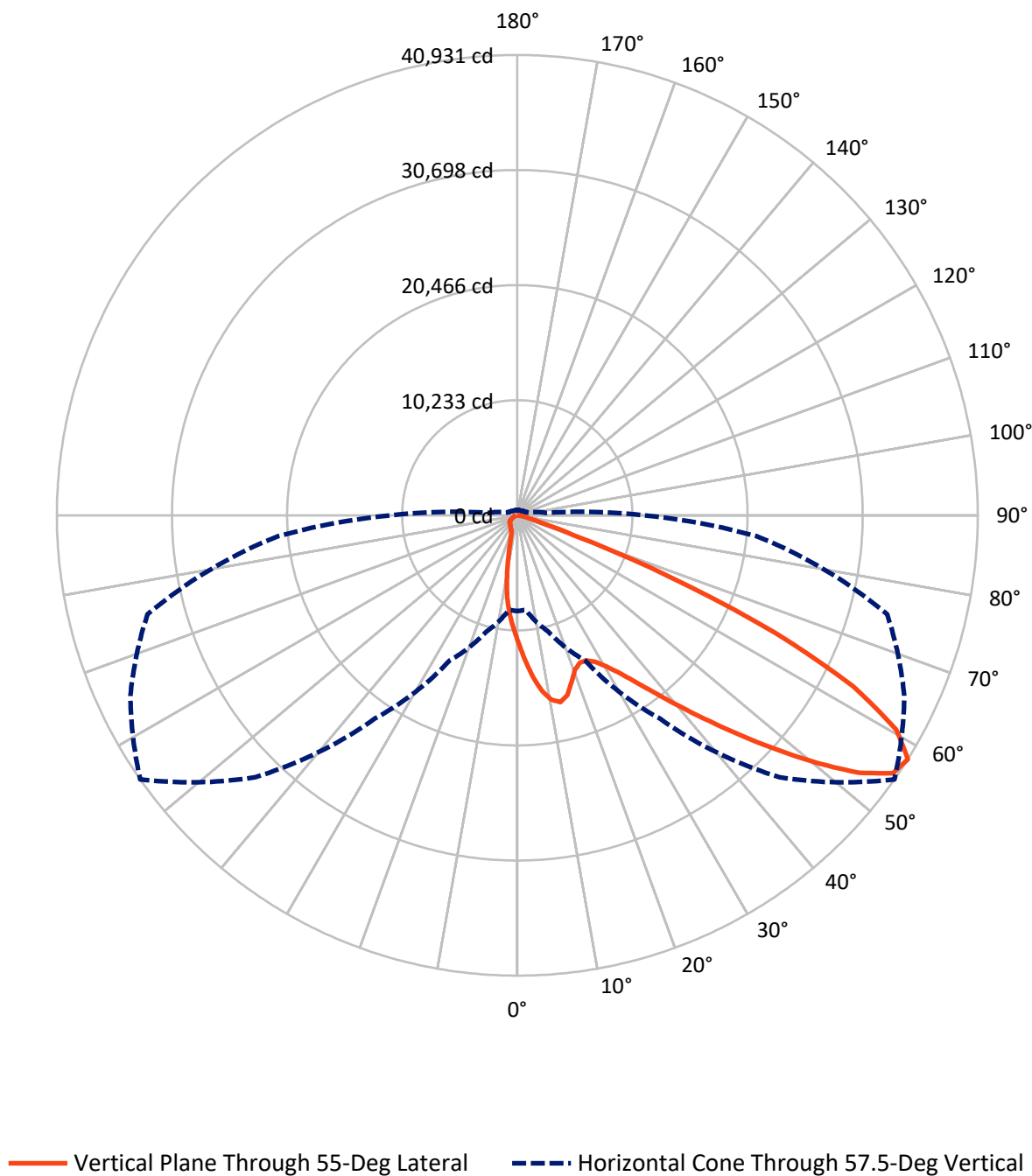
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 25.9 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	3662.3	0.0	3662.3
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	43232.5	0.0	43232.5
	% Fixture	92.2	0.0	92.2
Total	Lumens	46894.8	0.0	46894.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1051.4	2.2
10°-20°	2539.8	5.4
20°-30°	4063.6	8.7
30°-40°	6877.9	14.7
40°-50°	11292.1	24.1
50°-60°	12410.8	26.5
60°-70°	7118.8	15.2
70°-80°	1454.6	3.1
80°-90°	85.8	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°	46894.8	100.0
0°-180°	46894.8	100.0

Coefficient of Utilization



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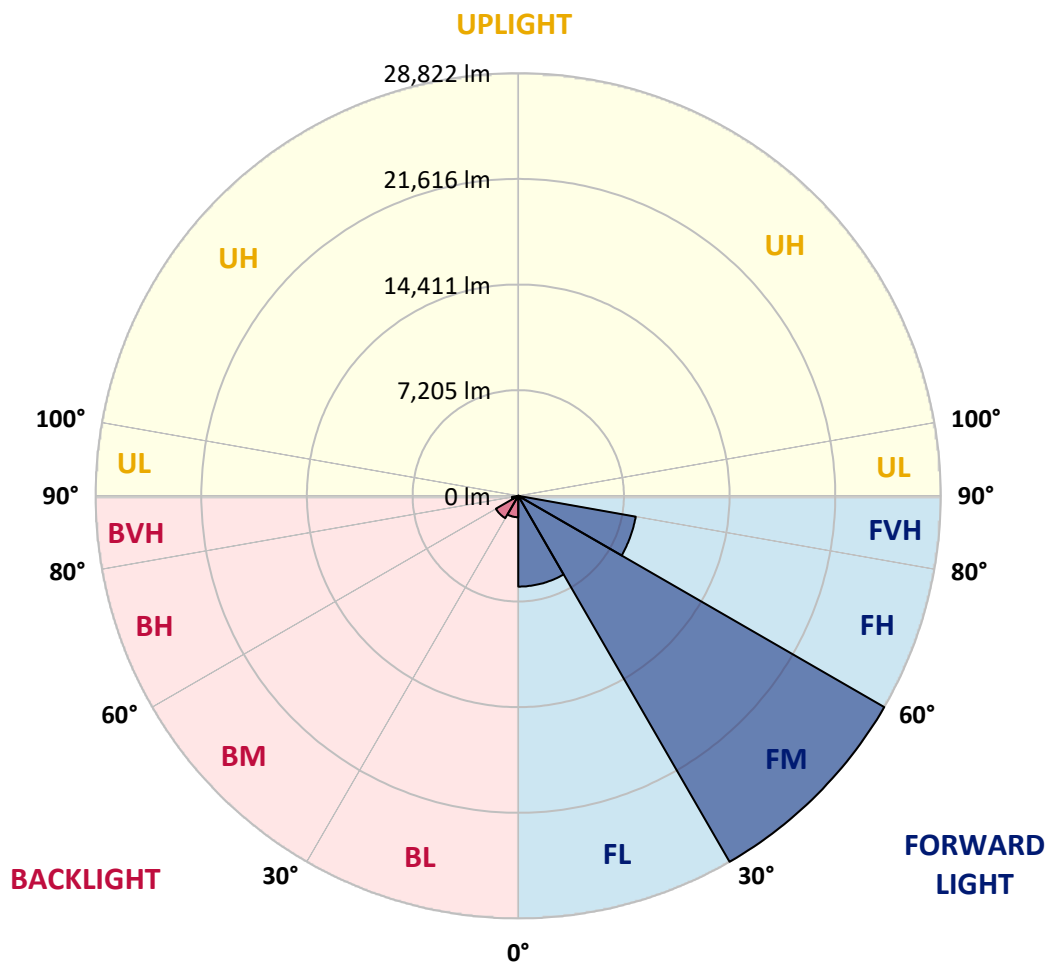
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6192.7	13.2			
FM	(30°-60°)	28821.9	61.5			
FH	(60°-80°)	8137.9	17.4			G4/12000
FVH	(80°-90°)	80.0	0.2			G1/100
BL	(0°-30°)	1462.1	3.1	B3/2500		
BM	(30°-60°)	1758.9	3.8	B2/2500		
BH	(60°-80°)	435.5	0.9	B1/500		G1/500
BVH	(80°-90°)	5.8	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°	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5
2.5°	14021.5	13845.1	13819.0	13784.4	13448.9	13197.4	12833.0	12434.0	11985.8	11528.9	11326.6
5°	16198.9	16060.1	16034.1	15872.1	15490.4	15062.5	14414.8	13596.4	12760.7	11777.6	11355.5
7.5°	16621.1	16595.1	16713.6	16707.8	16655.7	16317.5	15771.0	14796.5	13541.5	12084.1	11430.6
10°	14738.7	14805.1	15157.9	15467.4	16303.0	16788.8	16670.2	15866.4	14345.4	12434.0	11514.4
12.5°	13023.9	12945.9	13197.4	13547.3	14518.8	15964.7	17043.3	16759.9	15264.9	12830.1	11638.8
15°	11948.2	11916.4	12058.1	12220.0	12960.3	14417.6	16609.5	17485.7	16149.8	13298.6	11826.8
17.5°	11604.1	11578.1	11621.4	11661.9	12141.9	13269.6	15577.2	17930.9	16997.0	13833.5	12034.9
20°	11884.6	11849.9	11844.1	11812.3	12011.9	12781.0	14643.3	17962.8	17757.5	14319.4	12214.2
22.5°	12702.9	12662.4	12520.8	12393.5	12410.9	12847.6	14226.8	17644.8	18330.1	14773.3	12327.1
25°	14186.3	14119.8	13824.9	13397.0	13125.1	13310.1	14290.4	17225.4	18876.5	15129.0	12272.1
27.5°	16042.8	15956.0	15577.2	14941.0	14319.4	14093.7	14750.2	16936.3	19330.6	15400.8	12153.5
30°	17861.5	17748.8	17375.8	16881.3	15973.4	15262.0	15580.1	17063.5	19871.3	15684.2	11997.3
32.5°	19825.0	19718.0	19223.6	18610.5	17858.7	16901.5	16716.5	17685.2	20533.4	16080.3	11887.4
35°	22308.9	22141.2	21438.5	20602.8	19804.7	18836.1	18254.8	18758.0	21415.4	16684.7	11948.2
37.5°	25136.9	24911.4	24153.8	23000.0	21959.0	20874.6	20128.6	20232.7	22708.0	17494.4	12136.2
40°	27803.0	27597.7	26897.9	25810.6	24503.6	23188.0	22392.8	22161.4	24492.1	18480.4	12465.8
42.5°	29402.1	29217.0	28922.1	28462.3	27360.6	26018.9	25015.4	24515.2	26603.0	19660.2	12867.7
45°	29491.7	29329.8	29725.9	30260.9	30044.0	29150.5	27927.4	27010.7	28722.6	20767.6	13284.1
47.5°	28057.4	27947.5	29150.5	31018.5	31949.6	32325.5	31197.8	29298.0	30472.0	21562.9	13454.8
50°	24148.0	24107.5	26582.8	30012.2	32675.4	35107.3	34647.5	31426.2	31828.2	21973.4	13292.8
52.5°	20938.3	20790.8	22233.7	26790.9	31619.9	36570.5	38019.1	33514.0	32776.6	22051.5	12914.0
55°	15880.8	15750.7	17560.8	21401.0	28216.5	36050.0	40485.7	35668.3	33456.1	21852.1	12234.5
57.5°	8518.8	8437.8	10725.1	14244.1	22057.4	32927.0	40931.0	37946.8	34028.7	21322.9	11283.1
60°	3316.7	3302.2	4158.1	6911.0	13405.6	26788.1	38684.2	39314.6	34387.2	20672.3	10487.9
62.5°	2006.7	2050.2	2189.0	3102.7	5922.0	16641.3	33505.3	37758.8	34627.3	20076.6	9831.5
65°	1659.8	1662.7	1680.1	2131.2	2836.7	6963.0	25223.7	32640.7	34034.5	19015.4	8900.4
67.5°	1422.7	1448.7	1515.3	1691.6	2001.0	3053.6	14521.8	25284.4	30428.6	16545.9	7448.9
70°	1122.0	1156.6	1240.6	1390.8	1544.2	1911.3	5366.9	16823.5	23245.8	12471.6	5632.9
72.5°	945.6	942.7	986.0	1130.7	1226.0	1344.6	2064.7	9426.7	13509.7	5953.8	2787.5
75°	731.5	760.4	815.5	945.6	1003.4	974.5	1119.1	3443.9	4840.6	1804.4	948.4
77.5°	572.6	595.6	644.8	772.0	829.9	691.1	644.8	1231.8	1555.7	647.7	427.9
80°	257.4	277.6	439.5	569.7	676.6	477.1	349.9	630.4	691.1	295.0	216.9
82.5°	46.2	78.1	257.4	300.7	347.0	309.4	182.1	326.8	338.4	118.6	75.1
85°	2.9	5.7	89.7	109.9	138.8	101.2	54.9	130.1	112.7	40.5	28.9
87.5°	0.0	0.0	0.0	2.9	2.9	14.5	17.3	23.2	17.3	14.5	11.6
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°	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5	11300.5
2.5°	11118.3	10707.7	10308.6	9981.9	9791.0	9467.2	9253.2	9218.5	9128.9	9207.0
5°	10904.4	10169.8	9426.7	8761.6	8215.1	7509.6	6983.3	6760.6	6566.9	6633.4
7.5°	10803.1	9643.6	8486.9	7350.5	6182.3	5054.6	4216.0	3866.1	3600.1	3637.6
10°	10667.2	9097.1	7284.1	5549.0	3984.7	2871.4	2293.0	2079.1	1960.5	1963.4
12.5°	10563.1	8443.5	5887.4	3762.1	2426.1	1833.3	1654.0	1602.0	1567.2	1570.2
15°	10511.1	7674.4	4508.1	2507.0	1735.0	1552.8	1509.4	1486.2	1463.2	1460.3
17.5°	10424.4	6818.5	3299.4	1830.4	1518.1	1454.5	1416.9	1390.8	1361.9	1356.2
20°	10294.2	5846.9	2411.6	1547.0	1422.7	1373.5	1321.4	1286.8	1252.0	1246.3
22.5°	10054.2	4820.4	1853.5	1431.3	1353.3	1298.4	1234.7	1194.2	1159.6	1153.7
25°	9608.9	3857.4	1561.5	1359.0	1292.5	1226.0	1156.6	1101.7	1069.9	1064.2
27.5°	9045.0	3030.4	1416.9	1292.5	1214.5	1153.7	1075.6	1023.7	994.8	988.9
30°	8380.0	2333.5	1333.0	1217.4	1122.0	1069.9	1000.5	957.1	939.8	939.8
32.5°	7662.8	1865.1	1298.4	1142.2	1041.0	983.2	928.2	910.8	905.1	902.2
35°	6989.1	1619.3	1280.9	1081.5	968.7	913.8	890.6	893.5	905.1	905.1
37.5°	6390.5	1541.2	1272.3	1038.1	905.1	855.9	870.4	896.4	884.9	884.9
40°	5849.8	1549.9	1266.5	1006.2	853.0	824.1	853.0	832.8	803.9	800.9
42.5°	5436.3	1622.2	1255.0	980.3	821.2	800.9	789.5	757.6	754.7	760.4
45°	5135.6	1685.8	1252.0	968.7	786.5	749.0	734.5	702.6	760.4	775.0
47.5°	4779.9	1685.8	1252.0	928.2	728.7	714.2	691.1	656.4	714.2	728.7
50°	4320.1	1578.8	1202.9	881.9	682.4	673.7	633.2	589.9	578.3	587.0
52.5°	3738.9	1385.1	1078.6	818.4	636.1	618.8	569.7	537.8	529.2	529.2
55°	3076.7	1159.6	910.8	725.8	587.0	555.2	520.5	506.0	497.3	491.6
57.5°	2501.3	951.3	731.5	644.8	540.7	500.3	488.7	471.3	456.8	448.2
60°	2053.1	749.0	604.3	572.6	494.5	456.8	454.0	430.8	393.3	387.4
62.5°	1584.6	549.4	508.9	497.3	448.2	416.4	410.6	364.4	306.5	295.0
65°	1119.1	427.9	410.6	436.6	399.0	370.1	355.7	286.3	225.5	216.9
67.5°	786.5	358.5	323.9	381.7	347.0	309.4	300.7	242.9	188.0	182.1
70°	561.0	292.0	266.0	326.8	277.6	271.8	254.5	202.4	153.2	147.5
72.5°	396.2	222.6	205.3	283.4	190.9	234.2	208.2	156.1	115.6	109.9
75°	292.0	159.1	144.6	164.8	138.8	176.4	147.5	104.1	72.3	69.4
77.5°	214.0	101.2	86.7	81.0	81.0	109.9	81.0	43.4	31.8	28.9
80°	150.4	46.2	40.5	34.7	31.8	26.0	11.6	5.7	2.9	2.9
82.5°	89.7	20.2	20.2	14.5	8.7	0.0	0.0	0.0	0.0	0.0
85°	20.2	8.7	8.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	2.9	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)