

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: P968924

Luminaire Tested: **NAV-SB5C-830-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968924
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-SB5C-830-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA 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: 29707.6 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

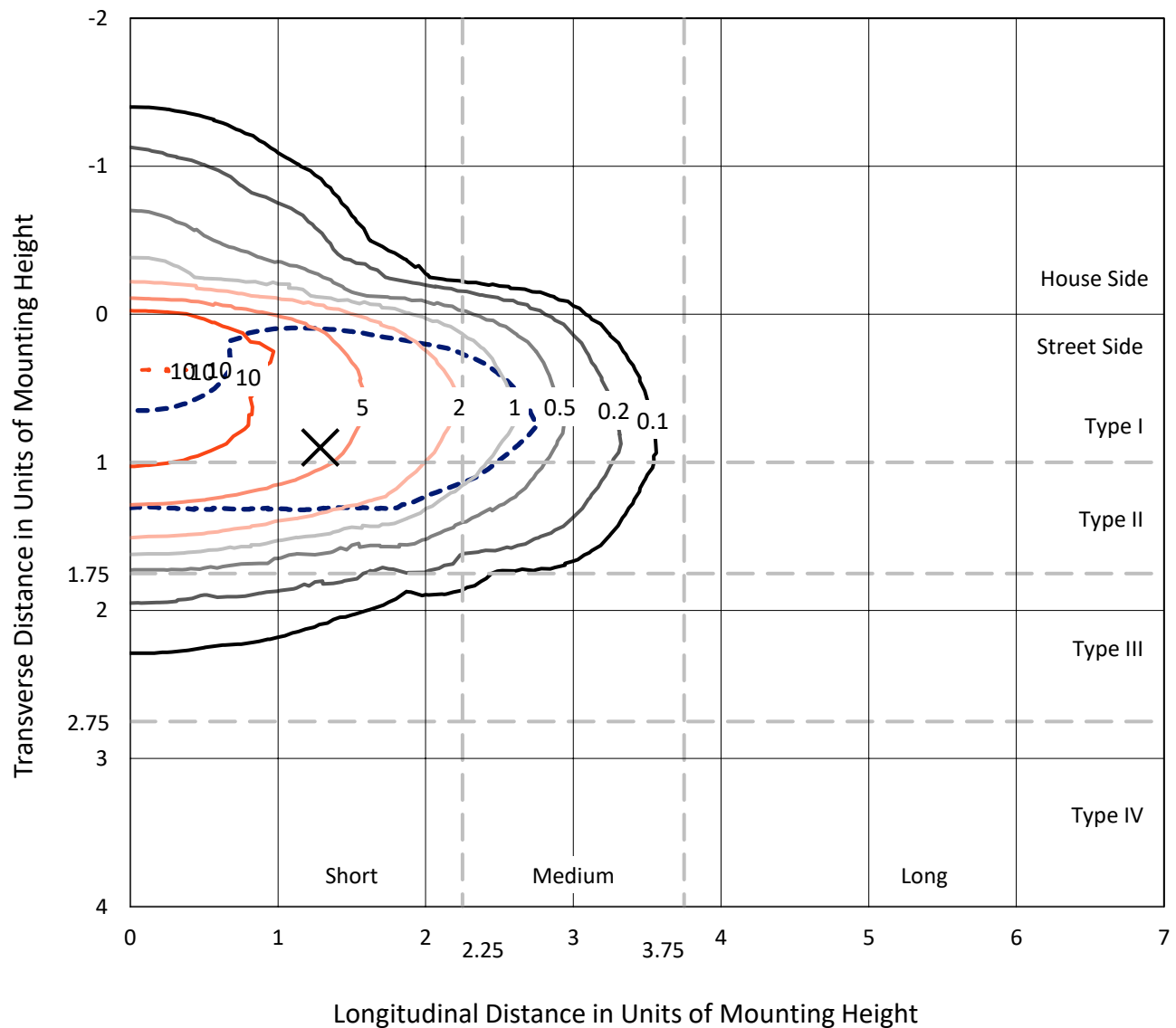
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968924
 CATALOG NUMBER: NAV-SB5C-830-U-AFL-HSS

Iso-Footcandle Lines of Horizontal Illumination

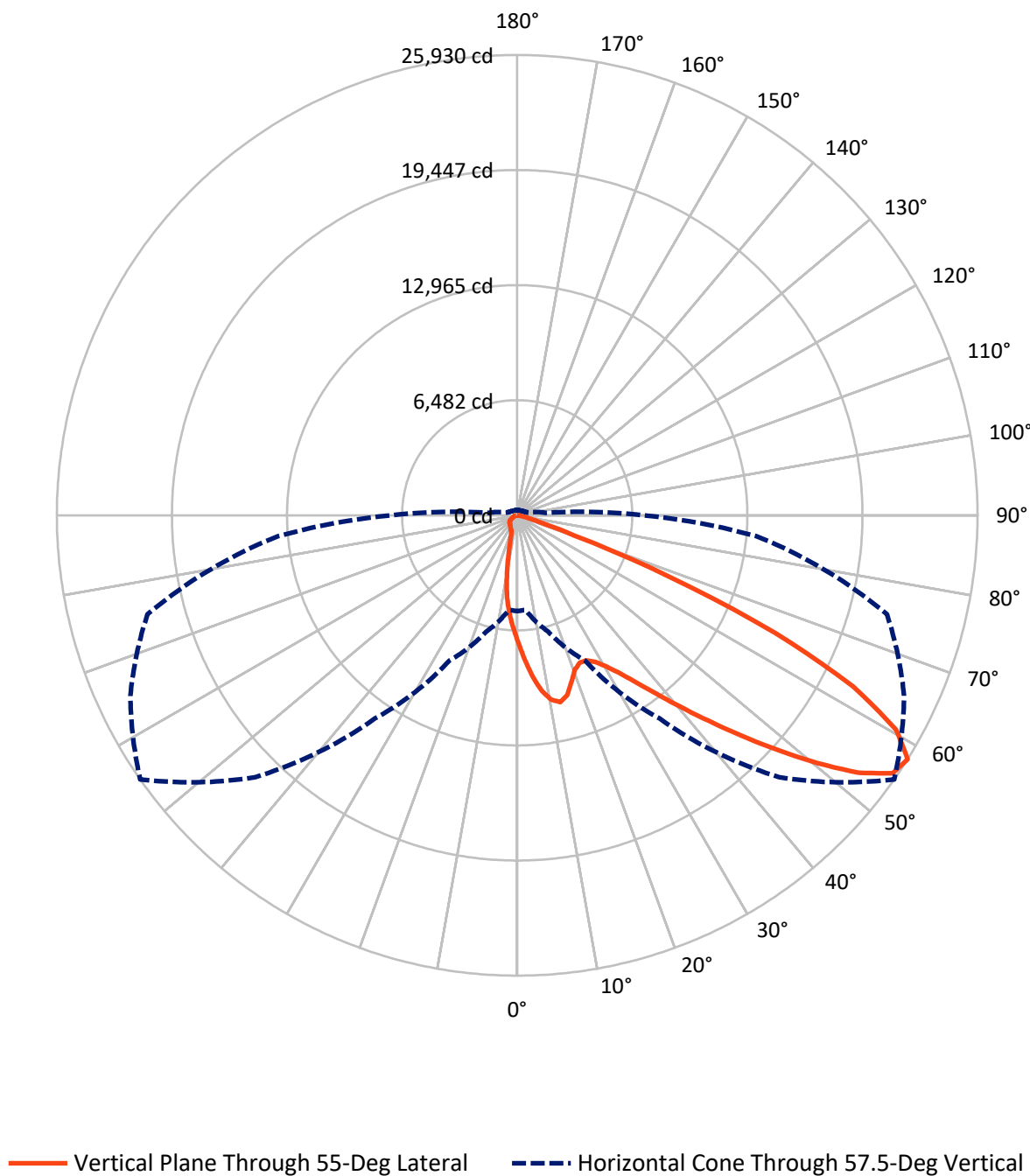
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.4 fc
 Type II - Short - N/A

REPORT NUMBER: P968924
CATALOG NUMBER: NAV-SB5C-830-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968924

CATALOG NUMBER: NAV-SB5C-830-U-AFL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2320.0	0.0	2320.0
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	27387.5	0.0	27387.5
	% Fixture	92.2	0.0	92.2
Total	Lumens	29707.6	0.0	29707.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	666.1	2.2
10°-20°	1608.9	5.4
20°-30°	2574.3	8.7
30°-40°	4357.1	14.7
40°-50°	7153.5	24.1
50°-60°	7862.2	26.5
60°-70°	4509.7	15.2
70°-80°	921.5	3.1
80°-90°	54.4	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°	29707.6	100.0
0°-180°	29707.6	100.0

Coefficient of Utilization



REPORT NUMBER: P968924

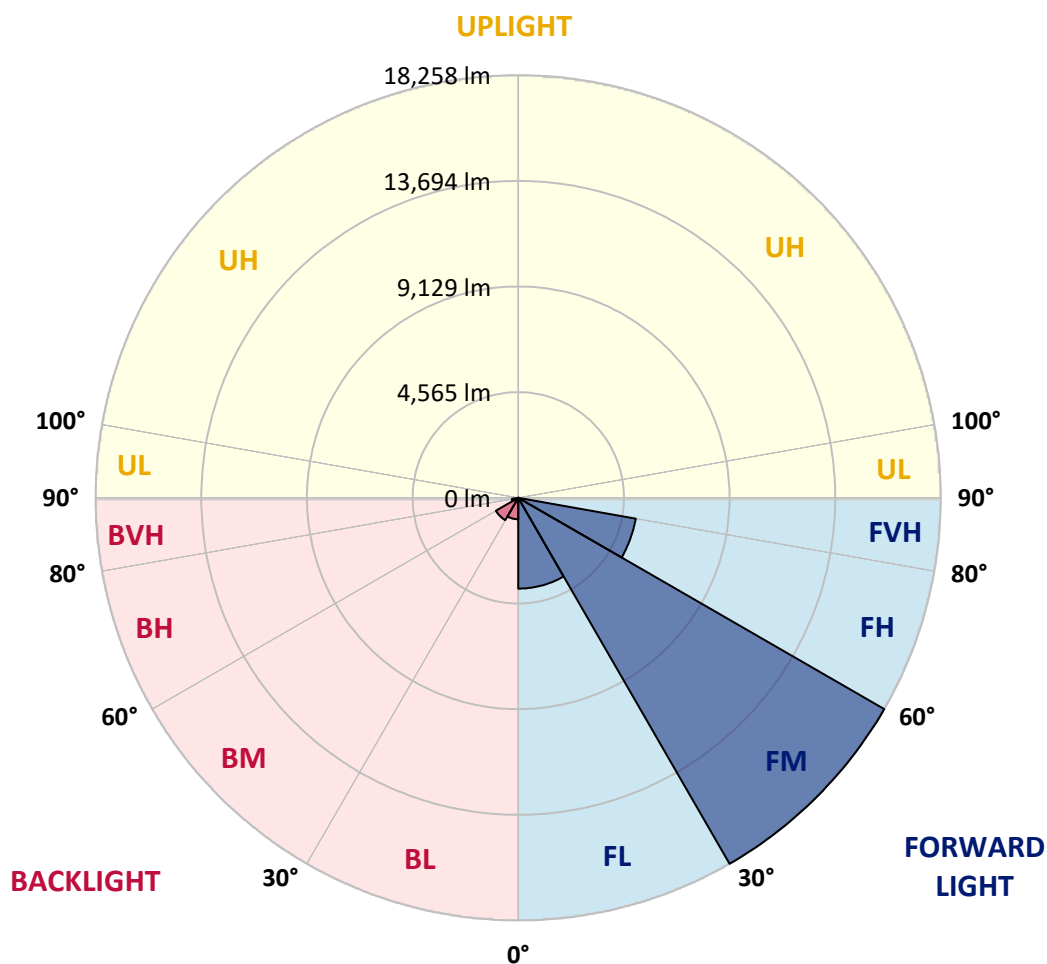
CATALOG NUMBER: NAV-SB5C-830-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3923.1	13.2			
FM	(30°-60°)	18258.5	61.5			
FH	(60°-80°)	5155.3	17.4			G3/7500
FVH	(80°-90°)	50.7	0.2			G1/100
BL	(0°-30°)	926.2	3.1	B2/1000		
BM	(30°-60°)	1114.2	3.8	B2/2500		
BH	(60°-80°)	275.9	0.9	B1/500		G1/500
BVH	(80°-90°)	3.7	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 Short



REPORT NUMBER: P968924

CATALOG NUMBER: NAV-SB5C-830-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8
2.5°	8882.5	8770.8	8754.3	8732.4	8519.8	8360.5	8129.7	7876.9	7592.9	7303.5	7175.3
5°	10261.9	10173.9	10157.5	10054.9	9813.1	9542.0	9131.7	8613.3	8083.9	7461.1	7193.6
7.5°	10529.3	10512.9	10587.9	10584.4	10551.3	10337.0	9990.8	9373.5	8578.4	7655.2	7241.2
10°	9336.8	9379.0	9602.4	9798.5	10327.9	10635.6	10560.5	10051.3	9087.8	7876.9	7294.3
12.5°	8250.5	8201.1	8360.5	8582.1	9197.6	10113.6	10796.8	10617.3	9670.3	8127.8	7373.1
15°	7569.1	7549.0	7638.7	7741.3	8210.2	9133.5	10522.0	11077.1	10230.7	8424.6	7492.2
17.5°	7351.1	7334.7	7362.2	7387.8	7691.8	8406.2	9868.1	11359.2	10767.5	8763.4	7624.1
20°	7528.8	7506.8	7503.2	7483.0	7609.4	8096.7	9276.4	11379.3	11249.3	9071.2	7737.6
22.5°	8047.3	8021.5	7931.9	7851.2	7862.3	8138.8	9012.6	11177.8	11612.0	9358.9	7809.1
25°	8987.0	8944.9	8758.0	8486.9	8314.7	8432.0	9052.9	10912.3	11958.2	9584.2	7774.3
27.5°	10163.0	10108.0	9868.1	9465.1	9071.2	8928.4	9344.2	10729.0	12245.8	9756.4	7699.2
30°	11315.2	11243.7	11007.5	10694.2	10119.0	9668.4	9869.9	10809.6	12588.3	9935.8	7600.3
32.5°	12559.0	12491.3	12178.0	11789.7	11313.3	10707.0	10589.8	11203.5	13007.9	10186.9	7530.7
35°	14132.6	14026.3	13581.1	13051.8	12546.2	11932.5	11564.4	11883.1	13566.5	10569.7	7569.1
37.5°	15924.1	15781.2	15301.3	14570.4	13910.9	13223.9	12751.4	12817.3	14385.4	11082.6	7688.2
40°	17613.1	17483.0	17039.7	16350.9	15522.9	14689.5	14185.7	14039.1	15515.6	11707.2	7897.0
42.5°	18626.1	18508.8	18322.0	18030.7	17332.8	16482.8	15847.1	15530.3	16852.8	12454.6	8151.6
45°	18682.9	18580.3	18831.2	19170.1	19032.7	18466.7	17691.8	17111.1	18195.6	13156.2	8415.5
47.5°	17774.2	17704.6	18466.7	19650.1	20239.9	20478.1	19763.6	18560.1	19303.8	13660.0	8523.5
50°	15297.6	15272.0	16840.0	19012.5	20699.7	22240.2	21949.0	19908.4	20163.0	13920.1	8420.9
52.5°	13264.3	13170.8	14084.9	16971.9	20031.1	23167.2	24084.9	21230.9	20763.8	13969.5	8180.9
55°	10060.4	9978.0	11124.7	13557.4	17875.0	22837.4	25647.4	22595.6	21194.2	13843.1	7750.4
57.5°	5396.5	5345.3	6794.2	9023.6	13973.2	20859.1	25929.5	24039.1	21557.0	13508.0	7147.8
60°	2101.1	2091.9	2634.1	4378.1	8492.3	16970.1	24506.2	24905.6	21784.1	13095.7	6644.0
62.5°	1271.3	1298.8	1386.7	1965.5	3751.6	10542.2	21225.4	23920.0	21936.1	12718.4	6228.2
65°	1051.4	1053.3	1064.3	1350.0	1797.0	4411.1	15979.0	20677.7	21560.7	12046.1	5638.4
67.5°	901.3	917.8	959.9	1071.6	1267.6	1934.4	9199.5	16017.6	19276.4	10481.8	4718.8
70°	710.7	732.8	785.9	881.1	978.2	1210.8	3399.9	10657.5	14726.1	7900.7	3568.4
72.5°	599.0	597.2	624.6	716.3	776.7	851.8	1307.9	5971.8	8558.3	3771.7	1765.9
75°	463.4	481.7	516.6	599.0	635.6	617.4	708.9	2181.7	3066.5	1143.1	600.9
77.5°	362.7	377.4	408.5	489.1	525.7	437.8	408.5	780.3	985.5	410.3	271.1
80°	163.1	175.9	278.4	360.9	428.7	302.3	221.6	399.3	437.8	186.9	137.4
82.5°	29.3	49.5	163.1	190.5	219.9	196.0	115.4	206.9	214.3	75.1	47.7
85°	1.8	3.7	56.8	69.6	87.9	64.2	34.8	82.4	71.4	25.6	18.3
87.5°	0.0	0.0	0.0	1.8	1.8	9.1	11.0	14.7	11.0	9.1	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P968924

CATALOG NUMBER: NAV-SB5C-830-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8	7158.8
2.5°	7043.4	6783.2	6530.5	6323.4	6202.6	5997.4	5861.9	5839.8	5783.0	5832.6
5°	6907.8	6442.5	5971.8	5550.5	5204.2	4757.2	4423.9	4282.9	4160.1	4202.2
7.5°	6843.7	6109.2	5376.4	4656.5	3916.4	3202.0	2670.8	2449.1	2280.6	2304.4
10°	6757.6	5763.0	4614.3	3515.2	2524.3	1819.0	1452.6	1317.1	1242.0	1243.8
12.5°	6691.7	5349.0	3729.6	2383.2	1536.9	1161.4	1047.9	1014.9	992.8	994.7
15°	6658.7	4861.7	2855.9	1588.2	1099.1	983.7	956.2	941.6	926.9	925.1
17.5°	6603.8	4319.5	2090.1	1159.6	961.8	921.4	897.6	881.1	862.7	859.2
20°	6521.4	3703.9	1527.8	980.0	901.3	870.1	837.1	815.2	793.1	789.6
22.5°	6369.2	3053.7	1174.2	906.7	857.3	822.5	782.2	756.6	734.5	730.9
25°	6087.2	2443.7	989.2	861.0	818.9	776.7	732.8	697.9	677.7	674.1
27.5°	5730.0	1919.7	897.6	818.9	769.4	730.9	681.4	648.5	630.2	626.5
30°	5308.7	1478.3	844.5	771.2	710.7	677.7	633.9	606.3	595.3	595.3
32.5°	4854.4	1181.5	822.5	723.5	659.5	622.8	588.0	577.1	573.4	571.5
35°	4427.5	1025.8	811.5	685.1	613.7	578.8	564.2	566.0	573.4	573.4
37.5°	4048.3	976.4	806.0	657.6	573.4	542.2	551.3	567.8	560.6	560.6
40°	3705.8	981.8	802.4	637.4	540.4	522.0	540.4	527.6	509.2	507.4
42.5°	3443.8	1027.7	795.0	620.9	520.3	507.4	500.1	479.9	478.1	481.7
45°	3253.4	1067.9	793.1	613.7	498.3	474.5	465.2	445.2	481.7	491.0
47.5°	3028.1	1067.9	793.1	588.0	461.7	452.4	437.8	415.8	452.4	461.7
50°	2736.7	1000.2	762.1	558.7	432.3	426.8	401.2	373.7	366.3	371.9
52.5°	2368.6	877.4	683.3	518.4	403.0	392.1	360.9	340.7	335.2	335.2
55°	1949.0	734.5	577.1	459.8	371.9	351.7	329.7	320.6	315.1	311.4
57.5°	1584.5	602.7	463.4	408.5	342.6	316.9	309.5	298.6	289.5	283.9
60°	1300.6	474.5	382.8	362.7	313.2	289.5	287.6	273.0	249.2	245.5
62.5°	1003.9	348.1	322.4	315.1	283.9	263.7	260.1	230.8	194.1	186.9
65°	708.9	271.1	260.1	276.6	252.8	234.5	225.3	181.3	142.9	137.4
67.5°	498.3	227.1	205.2	241.8	219.9	196.0	190.5	153.9	119.1	115.4
70°	355.4	185.0	168.5	206.9	175.9	172.2	161.2	128.2	97.1	93.4
72.5°	250.9	141.0	130.1	179.5	121.0	148.4	131.9	98.9	73.3	69.6
75°	185.0	100.8	91.6	104.4	87.9	111.7	93.4	65.9	45.8	44.0
77.5°	135.5	64.2	54.9	51.2	51.2	69.6	51.2	27.5	20.2	18.3
80°	95.2	29.3	25.6	21.9	20.2	16.5	7.3	3.7	1.8	1.8
82.5°	56.8	12.8	12.8	9.1	5.5	0.0	0.0	0.0	0.0	0.0
85°	12.8	5.5	5.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	1.8	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)