

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: P971554

Luminaire Tested: **NAV-SB6D-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971554
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42366.3 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

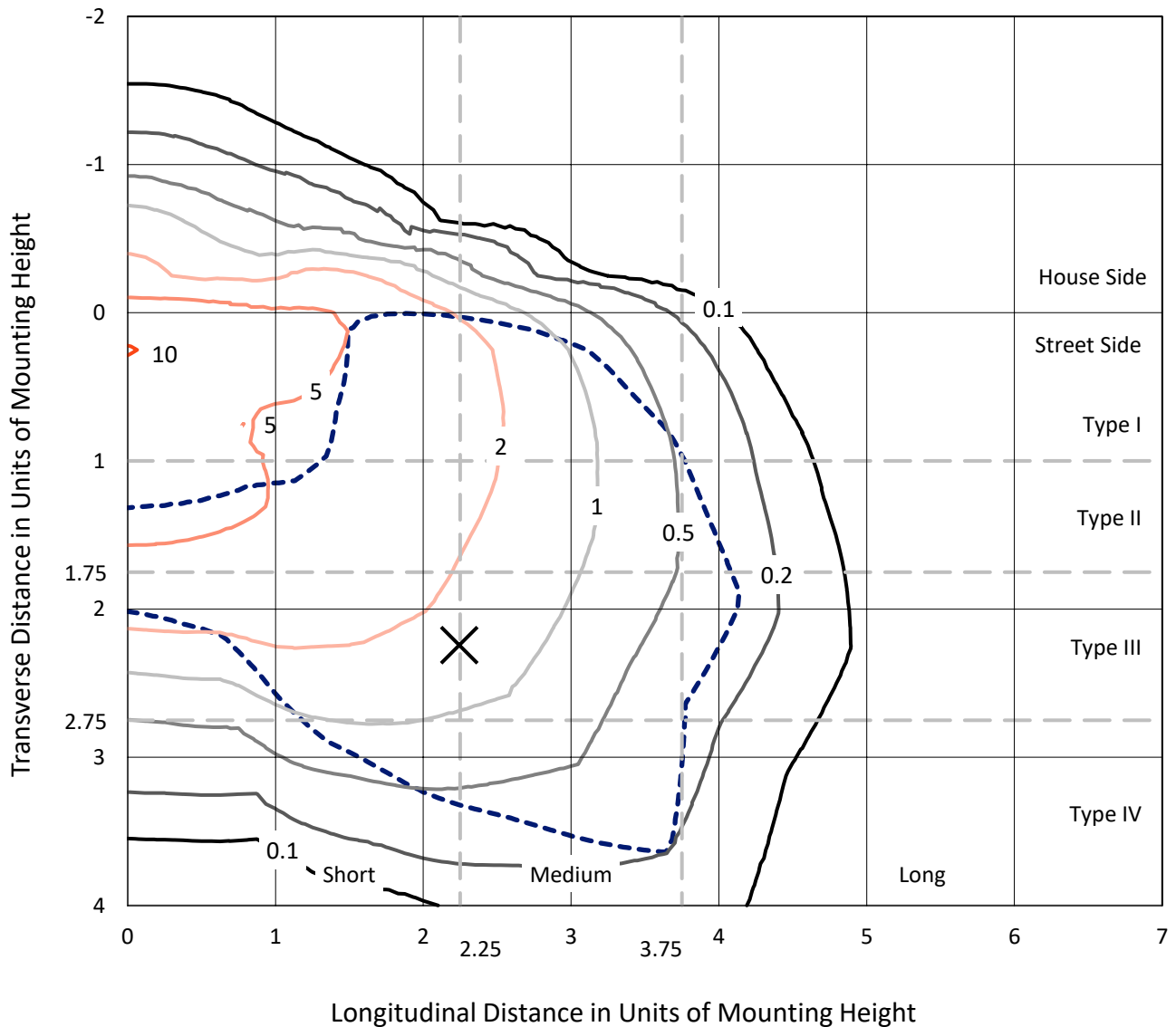
Input Watts (W): 440.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

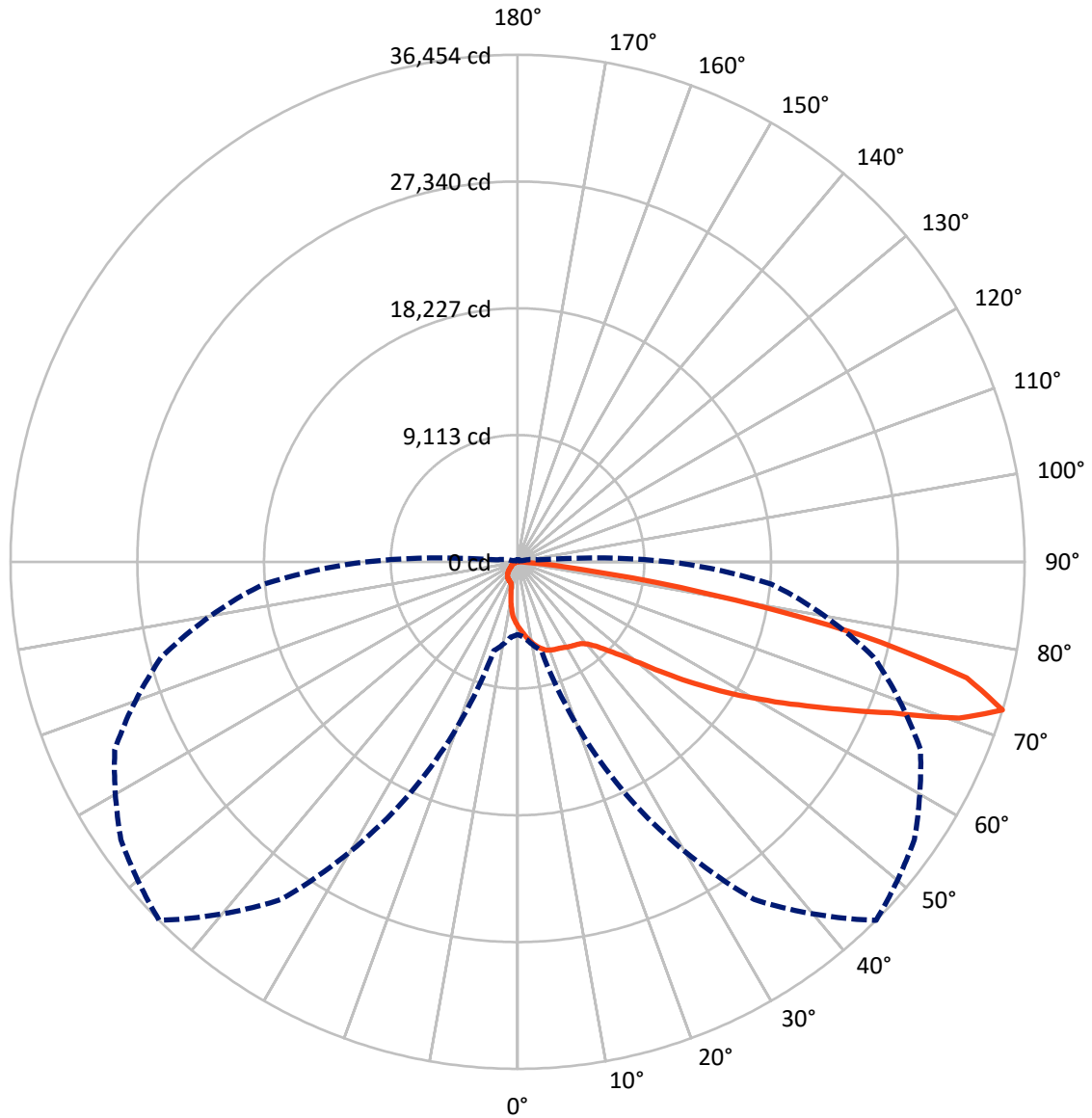
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc
 Type IV - Short - N/A

REPORT NUMBER: P971554
CATALOG NUMBER: NAV-SB6D-827-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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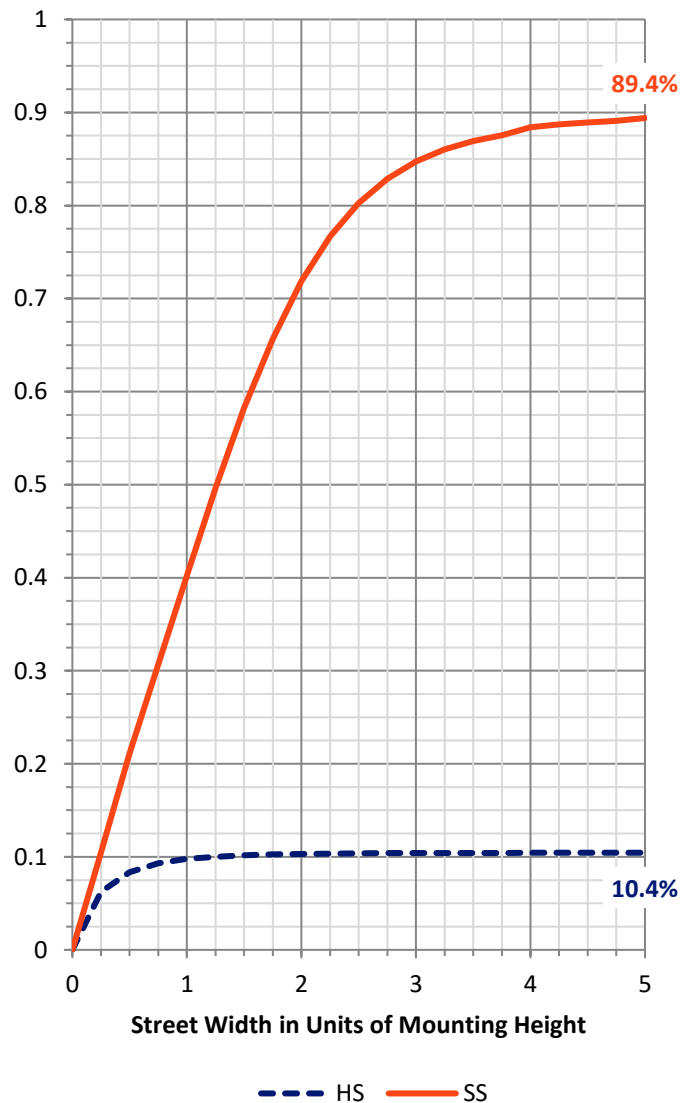
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4451.5	0.0	4451.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	37914.8	0.0	37914.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	42366.3	0.0	42366.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	437.3	1.0
10°-20°	1278.1	3.0
20°-30°	2098.8	5.0
30°-40°	2976.5	7.0
40°-50°	4919.9	11.6
50°-60°	8838.1	20.9
60°-70°	12272.2	29.0
70°-80°	8901.8	21.0
80°-90°	643.6	1.5
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°	42366.3	100.0
0°-180°	42366.3	100.0

Coefficient of Utilization



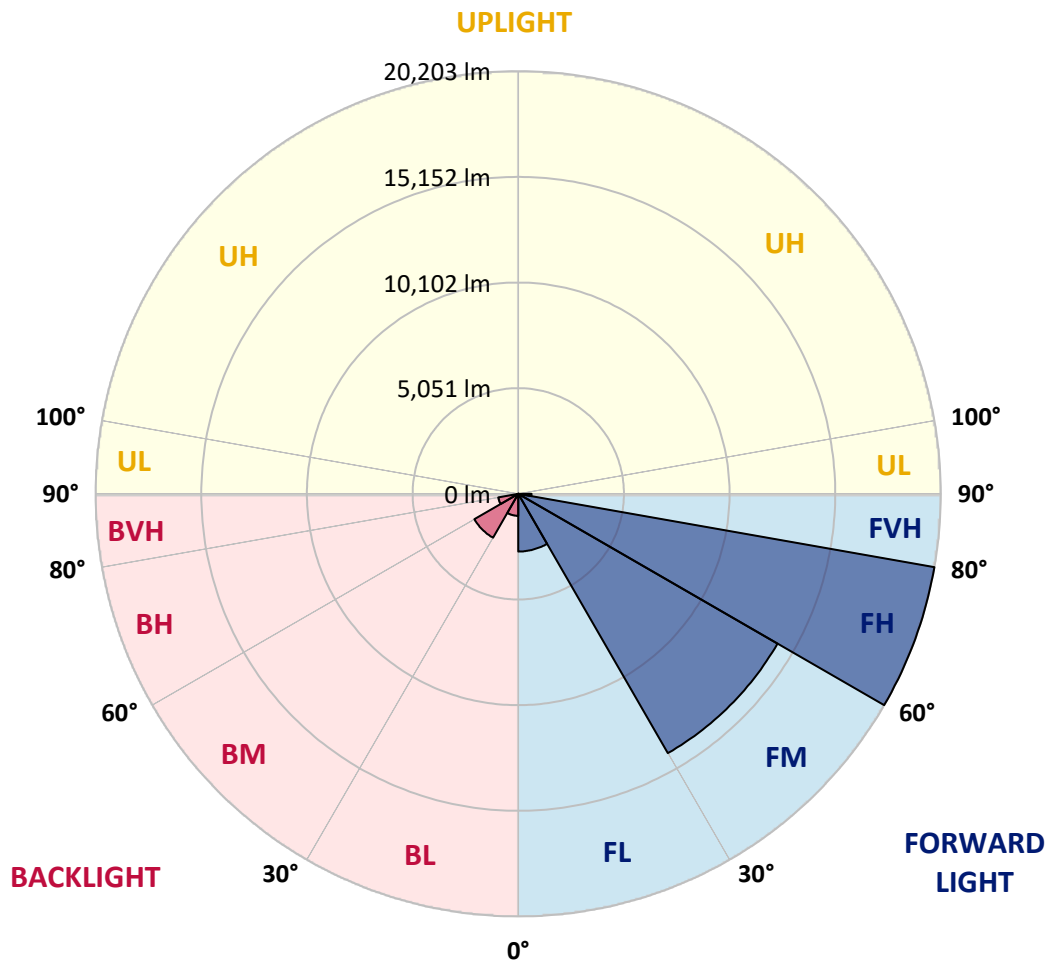
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 CATALOG NUMBER: NAV-SB6D-827-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2759.7	6.5			
FM (30°-60°)	14313.6	33.8			
FH (60°-80°)	20203.3	47.7			G5
FVH (80°-90°)	638.2	1.5			G4/750
BL (0°-30°)	1054.4	2.5	B3/2500		
BM (30°-60°)	2421.0	5.7	B2/2500		
BH (60°-80°)	970.7	2.3	B2/1000		G2/1000
BVH (80°-90°)	5.4	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-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3
2.5°	5069.3	5078.0	5072.2	5037.5	4979.7	4947.9	4930.5	4872.6	4835.0	4768.6	4699.1
5°	5534.9	5569.5	5549.3	5480.0	5370.1	5292.0	5268.8	5150.3	5043.3	4919.0	4774.3
7.5°	6029.4	6046.7	6009.2	5919.5	5772.0	5639.0	5618.7	5453.9	5283.3	5092.4	4895.8
10°	6457.4	6477.6	6419.8	6289.6	6121.9	5957.1	5928.2	5745.9	5543.6	5309.3	5057.8
12.5°	6815.9	6836.2	6761.0	6604.9	6419.8	6249.1	6220.2	6029.4	5806.7	5546.5	5234.2
15°	7087.8	7125.4	7024.1	6856.4	6656.9	6486.3	6471.8	6283.9	6067.0	5777.8	5445.2
17.5°	7246.9	7284.4	7188.9	6986.6	6815.9	6671.3	6654.0	6497.9	6295.4	6017.8	5650.5
20°	7272.9	7307.5	7206.4	7030.0	6888.2	6772.6	6763.9	6651.1	6503.6	6237.6	5873.2
22.5°	7194.8	7238.1	7145.6	7003.9	6905.6	6844.8	6833.3	6769.7	6685.8	6460.3	6081.4
25°	7113.8	7148.5	7079.1	6954.7	6902.7	6896.9	6905.6	6894.0	6876.7	6685.8	6324.4
27.5°	7108.1	7145.6	7067.6	6949.0	6920.1	6980.8	6989.5	7044.4	7058.9	6891.2	6558.6
30°	7157.2	7183.2	7108.1	6983.6	6969.2	7108.1	7110.9	7209.2	7232.4	7064.6	6789.9
32.5°	7264.2	7293.1	7217.9	7035.7	7015.5	7209.2	7217.9	7348.0	7385.6	7249.7	7032.8
35°	7515.7	7550.5	7463.7	7180.3	7108.1	7304.7	7330.7	7483.9	7559.2	7446.3	7284.4
37.5°	8143.3	8042.0	7923.5	7472.4	7319.1	7455.0	7498.4	7677.7	7810.7	7680.6	7585.2
40°	9701.9	9383.9	9013.7	7969.8	7689.2	7776.1	7810.7	7990.0	8172.2	8044.9	7998.7
42.5°	12041.4	11665.5	11069.8	9114.9	8247.4	8290.7	8316.7	8473.0	8730.3	8629.1	8640.6
45°	14126.3	13990.4	13383.2	11069.8	9291.3	9077.3	9109.2	9190.2	9568.9	9531.4	9606.5
47.5°	15728.4	15650.3	15181.9	13313.8	11055.3	10040.3	10130.0	10167.5	10714.1	10847.1	11049.5
50°	16960.4	16931.5	16512.1	15309.1	13360.1	11460.1	11492.0	11411.0	12229.4	12559.0	12943.6
52.5°	18122.8	18221.1	17911.8	17162.8	15821.0	13319.6	13313.8	12932.1	14036.8	14534.1	15190.6
55°	19172.5	19207.3	19239.0	19054.0	18296.4	15436.4	15381.5	14756.8	16133.3	16648.0	17359.4
57.5°	20158.7	20173.1	20456.5	20835.4	20872.9	17709.3	17608.1	16859.1	18423.6	18790.8	19227.5
60°	20820.9	20887.3	21485.9	22538.6	22998.4	20054.5	19999.6	19236.2	20754.4	20925.0	20844.0
62.5°	19866.6	20271.4	21780.9	23868.9	25005.3	22654.2	22628.2	21911.1	23206.6	23067.8	22373.8
65°	16081.2	16766.6	19421.3	24768.2	26974.6	25557.7	25595.2	24831.8	25725.3	25274.2	23617.2
67.5°	11249.1	11972.0	15112.5	24840.5	29175.3	28967.0	29183.9	27986.7	28400.3	27388.1	23912.2
70°	7778.9	8151.9	10196.5	23284.7	30890.1	33663.4	33657.5	31861.7	31060.7	28351.1	22408.4
72.5°	5231.3	5425.0	6622.2	18472.8	29629.3	36453.9	36286.1	34822.9	31957.1	26514.8	18307.9
75°	2206.4	2348.2	3065.3	10381.5	23440.8	33351.0	32897.0	30774.4	28394.4	20878.7	11422.6
77.5°	699.8	760.6	1208.8	3715.9	12911.8	25068.9	24588.9	19218.9	19030.9	10474.1	4175.7
80°	332.5	387.4	679.6	1492.2	5080.8	13634.8	13568.2	8718.8	8186.7	2828.2	838.7
82.5°	144.6	170.7	376.0	798.2	2272.9	4864.0	4962.3	2967.0	2455.1	1072.9	257.4
85°	46.2	60.7	173.5	367.3	960.1	1208.8	1194.3	705.6	989.0	584.1	89.7
87.5°	0.0	0.0	57.8	83.8	98.3	69.4	78.1	60.7	274.7	162.0	31.8
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°	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3	4641.3
2.5°	4664.5	4618.1	4537.3	4462.0	4395.5	4329.0	4288.5	4230.7	4224.9	4224.9	4239.4
5°	4696.2	4621.1	4476.5	4323.2	4146.8	3979.2	3811.4	3649.4	3597.3	3559.8	3577.1
7.5°	4788.8	4670.2	4441.8	4149.7	3814.2	3447.0	3189.6	2912.0	2805.0	2747.2	2755.9
10°	4921.8	4759.9	4412.8	3901.0	3357.4	2857.1	2489.8	2189.1	2073.4	2024.3	2024.3
12.5°	5069.3	4869.8	4360.9	3591.6	2857.1	2258.5	1899.9	1761.1	1743.7	1743.7	1743.7
15°	5245.7	5002.8	4271.2	3227.2	2333.7	1787.1	1659.9	1665.6	1683.0	1694.6	1694.6
17.5°	5427.9	5144.5	4129.5	2819.5	1871.0	1607.8	1610.7	1619.4	1633.8	1645.4	1645.4
20°	5624.5	5286.2	3941.5	2385.7	1604.9	1555.7	1564.5	1573.2	1584.6	1590.5	1593.4
22.5°	5835.6	5419.2	3718.8	1960.6	1515.3	1512.4	1515.3	1524.0	1538.4	1538.4	1544.3
25°	6061.2	5566.7	3464.4	1651.2	1469.0	1469.0	1474.8	1480.6	1492.2	1492.2	1495.1
27.5°	6292.6	5702.6	3195.4	1489.2	1428.5	1425.7	1425.7	1434.3	1440.1	1443.0	1445.9
30°	6547.0	5861.7	2926.5	1454.6	1396.8	1382.3	1373.6	1379.3	1385.2	1388.1	1393.8
32.5°	6807.2	6014.9	2686.4	1469.0	1364.9	1338.9	1309.9	1304.2	1304.2	1315.8	1324.4
35°	7096.5	6182.6	2501.4	1518.2	1347.6	1275.3	1229.0	1202.9	1205.9	1223.2	1231.9
37.5°	7443.4	6385.0	2365.5	1561.6	1336.0	1202.9	1127.8	1096.0	1075.7	1096.0	1090.2
40°	7897.5	6682.9	2267.2	1596.2	1321.5	1119.1	1017.9	965.9	928.2	939.8	934.1
42.5°	8565.5	7151.4	2229.6	1599.2	1289.8	1020.8	905.2	835.7	780.7	783.7	772.1
45°	9502.5	7891.7	2423.3	1561.6	1220.4	913.8	786.6	694.0	659.3	650.7	639.1
47.5°	10786.4	8970.3	2871.5	1483.5	1119.1	809.7	670.9	592.9	566.8	552.4	543.7
50°	12506.9	10355.5	3369.0	1396.8	1017.9	711.3	575.4	526.3	508.9	494.5	491.6
52.5°	14502.3	11761.0	3776.7	1309.9	916.7	624.6	514.8	485.8	471.4	459.8	456.9
55°	16332.9	12729.7	3753.6	1217.4	818.4	555.2	471.4	454.0	436.6	425.1	419.3
57.5°	17472.1	12865.6	3094.2	1116.2	705.6	500.3	430.9	419.3	399.0	384.6	381.7
60°	17995.6	12090.6	2168.8	983.2	592.9	448.2	387.4	381.7	355.7	335.5	329.6
62.5°	18091.0	10650.5	1445.9	818.4	494.5	399.0	344.1	335.5	300.7	266.1	248.7
65°	17703.5	8591.6	1000.6	639.1	422.2	347.1	295.0	277.6	240.1	205.3	193.7
67.5°	16477.4	6032.2	696.9	459.8	358.5	274.7	234.2	228.5	199.6	170.7	162.0
70°	14230.5	3438.4	465.6	344.1	283.4	188.0	185.1	190.9	162.0	138.8	127.2
72.5°	10910.7	1573.2	289.2	251.5	193.7	127.2	147.5	150.4	124.3	104.1	92.6
75°	6422.6	673.8	182.1	162.0	98.3	83.8	107.0	109.9	83.8	66.5	57.8
77.5°	2186.2	254.5	115.7	95.4	49.2	46.2	69.4	69.4	46.2	26.0	20.2
80°	497.4	95.4	57.8	37.6	23.2	20.2	23.2	20.2	11.6	2.9	0.0
82.5°	141.7	37.6	23.2	14.5	8.7	8.7	2.9	0.0	0.0	0.0	0.0
85°	40.5	17.3	5.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	17.3	2.9	0.0	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	0.0

(END OF REPORT)